



Legislative Report

Evaluation of Rate Methodology for Services Provided under Elderly Waiver and Related Programs

Aging and Adult Services Division

January 2019

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Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is \$326,000.

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I. Executive summary

Minnesota Statutes, section 256B.0915, subdivision 17 directed the Department of Human Services (DHS) to make recommendations for changes to the rate methodology defined in subdivisions 11-16 based on the results of an evaluation. DHS formed a stakeholder group and contracted with Navigant Consulting (Navigant) to assist with the evaluation.

The evaluation activities and findings indicate that a number of changes to the statute would improve the rate-setting methodology. Fully implementing the following recommendations will help ensure that the service rates are “consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers”, as required by the federal government, and available for public program participants into the future.¹

Summary of recommendations

- Change or adjust several standard occupational classification (SOC) codes in statute to better align the SOC codes to service definitions and standards and wages paid by providers.
- Change or adjust some of the nonwage cost factors in statute to better reflect the results of the provider wage and cost survey conducted through the rates evaluation.
- Add new nonwage cost factors to address areas of provider costs that were not addressed in the existing statute.
- Change language in statute about how the rates should be calculated mathematically, including some guidance on the order of mathematical operations.
- Change the home delivered meals rate in statute to reflect the results of the provider wage and cost survey, and change the timing of inflationary adjustments for the service.
- Implement the new rate values without blending them with June 30, 2017 rates.
- Implement new rates on January 1, 2020 and update rate method values and rate calculations every two years.
- Conduct an evaluation of rate methods and rates values by January 1, 2021.
- Align select rate setting methods and rates across the aging and disability waiver programs.

¹ Social Security Act, Title XIX, Section 1902(a)30(A)

II. Legislation

Minnesota Statutes 2018, section 256B.0915 MEDICAID WAIVER FOR ELDERLY SERVICES.

Subd. 17. **Evaluation of rate methodology.**

The commissioner, in consultation with stakeholders, shall conduct a study to evaluate the following:

- (1) base wages in subdivision 14, to determine if the standard occupational classification codes for each rate and component rate are an appropriate representation of staff who deliver the services; and
- (2) factors in subdivision 15, and adjusted base wage calculation in subdivision 16, to determine if the factors and calculations appropriately address nonwage provider costs.

By January 1, 2019, the commissioner shall submit a report to the legislature on the changes to the rate methodology in this statute, based on the results of the evaluation. Where feasible, the report shall address the impact of the new rates on the workforce situation and client access to services. The report should include any changes to the rate calculations methods that the commissioner recommends.

Laws of Minnesota, 2017 1st Special Session, chapter 6, article 3, section 47 requires the Department of Human Services to report to the legislature on the results of a study of adult day services in Minnesota. This legislative report addresses the topics of resident (participant) acuity, staffing and support levels, and projected demand for the service. The topics of adult day services models and quality assurance are addressed in the report to the legislature titled *Adult Day Services Study*, submitted to the legislature on January 1, 2019.

Sec. 47 **DIRECTION TO THE COMMISSIONER; ADULT DAY SERVICES STAFFING RATIOS; ELDERLY WAIVER.**

The commissioner of human services shall:

- (1) study existing adult day services models, including resident acuity, staffing and support levels, and quality assurance;
- (2) project demand for adult day services into the future; and
- (3) report to the legislature by January 1, 2019.

III. Introduction

This report is submitted to the Minnesota Legislature as required by Minnesota Statutes 2018, section 256B.0915, subdivision 17, and Laws of Minnesota, 2017 1st Special Session, chapter 6, article 3, section 47. The report conveys activities, findings, and recommendations connected with an evaluation of the rate methodology for services provided under Elderly Waiver (EW) and related programs, and adult day services' projected demand, participant acuity, and staffing and support levels.

Evaluation process

As requested by the legislature, DHS formed a stakeholder group to support the evaluation. The stakeholder group was made up of providers and provider associations connected to services affected by the rate methodology. The complete list of stakeholders is included in Appendix A. The first meeting of the stakeholder group was held on November 13, 2017.

A request for proposals for an outside firm to support the evaluation was released on November 30, 2017. Navigant Consulting (Navigant) was selected through a review process and began work on the evaluation on February 7, 2018. Between February 7 and the submission of this report, the full stakeholder group met on nine occasions. The stakeholder group provided input at each step in the evaluation process. Summarized below are the key steps in the evaluation process:

- Review and approval of a research plan,
- Development and release of a provider wage and cost survey,
- Analysis of adult day services claims data focused on participant acuity and demand projections,
- Implementation of focus groups surrounding select nonwage cost factors,
- Analysis of provider wage and cost survey data,
- Comparing rate methodology to provider wage and cost survey data,
- Comparing rate methodology to rate methods in other states and other relevant data sets, and
- Review of Navigant's evaluation report.

Provider wage and cost survey

The development and implementation of a provider wage and cost survey was a central feature of the evaluation. The provider wage and cost survey was developed by Navigant to compare the base wage SOC code and nonwage cost factors in statute to wage and cost information of providers that deliver services affected by the methodology. The survey also helped address other topics under evaluation.

Navigant developed the survey based on the Minnesota methodology, but also based on their experience conducting similar wage and cost surveys in other states. The survey went through several rounds of revisions based on feedback provided by the stakeholder group and DHS. A detailed instruction guide, online trainings, and technical assistance by email or phone were offered to prepare and support respondents. Letters, emails,

and other communications were sent prior to the release, and during the survey, to promote the survey. The overall response rate for the provider wage and cost survey was 11 percent. The response rate for providers in the random sample group was 27 percent. These response rates compare very well to similar surveys conducted in other states, and voluntary survey studies generally.

More information about the evaluation process, including the provider wage and cost survey, is available in the evaluation report prepared by Navigant, which is included as Appendix B.

Report overview

Section IV of this legislative report describes the five areas of focus in the evaluation and summarizes the key findings of each one. Section V puts forward recommendations as requested by Minnesota Statute, section 256B.0915, subdivision 17, based on the evaluation's findings. Section VI provides suggested language to implement the recommendations.

IV. Key evaluation findings

As requested by the legislature, the evaluation focused on five areas:

- A. Base wages and Bureau of Labor Statistics (BLS) Standard Occupational Classification (SOC) codes,
- B. Nonwage cost factors,
- C. Home delivered meals rate,
- D. Adult day services participant acuity and staffing levels, and
- E. Adult day services demand projections.

This section summarizes the key evaluation findings connected with each focus area. For a more detailed description of evaluation findings, please see the report prepared by Navigant in Appendix B.

A. Base wages and standard occupational classification (SOC) codes

Research activities related to this area of the evaluation are listed below.

- Comparing SOC code wages and definitions to the results of the provider wage and cost survey.
- Comparing SOC code definitions to service definitions and related provider requirements.
- Reviewing SOC codes assigned to each service with the stakeholder group for feedback.
- Collecting feedback from stakeholders on the competitiveness of current wage levels in the industry.
- Comparing base wage information in Minnesota's rate methodology to other states.

SOC code alignment with service definitions and requirements

The evaluation found many of the SOC codes in statute aligned well with the definitions and requirements of each service, and often, with the staffing practices of providers. At times, the statute assigned more than one SOC code for a given service to reflect the various tasks that occur in the service, and the types of workers typically employed by providers. The blended SOC codes also generally reflected the definitions and requirements of each service and the staffing practices of many providers.

The evaluation suggests that SOC code selections or the blend of multiple SOC codes should be changed in some cases to better reflect the definitions and requirements of each service. Analysis of the SOC codes named in statute also indicated that using two additional SOC code classifications would improve the rate-setting methods:

- First-Line Supervisors of Personal Service Workers (SOC 39-1021), to support a revised Supervisor factor that will be described below; and
- Social and Human Service Assistants (SOC 21-1093), to support the direct worker base wage for the Individual Community Living Support (ICLS) service rate.

SOC code wage values and provider wage and cost survey findings

The evaluation found that many of the SOC code wage values aligned well with the average and median wages paid to direct care workers and supervisors. These findings are based on the results of the provider wage and cost survey. However, service by service, some of the SOC codes in statute yielded base wage values significantly higher or lower than the median or average wages found in the survey results. In those cases, the study recommended replacing a specific SOC code for a service, or adjusting the blend of SOC codes for a service.

The findings support continued use of the average BLS wages for the Minneapolis-St Paul, Bloomington, MN-WI statistical area to set statewide rates. The provider wage and cost survey did not show any significant regional differences between the average and median wages paid by providers.

The SOC codes assigned to the ICLS service required the most analysis and consideration, because the service is new and there were few wage and cost survey responses for the service. The wage value for the recommended SOC codes is higher than the survey results. However, the evaluation considered the service definition and requirements for ICLS in making a recommendation. The recommendation also reflects the SOC code and base wage values for the Independent Living Skills service provided through the Disability Waiver Rate System, and ICLS and ILS are comparable services.

B. Nonwage cost factors

Research activities related to this area of the evaluation included:

- Comparing the nonwage cost factors in statute to the results of the provider wage and cost survey,
- Reviewing the nonwage cost factors with the stakeholder group for feedback,
- Comparing nonwage cost information from the provider wage and cost survey with the Disability Waiver Rates System nonwage cost components and nonwage cost factors used in other states,
- Considering nonwage cost areas beyond the cost factors named in statute, and
- Recommended changes to nonwage cost factors.

The evaluation findings on nonwage cost factors suggest that a number of changes are needed to strengthen the existing statute. A brief summary of nonwage cost findings by factor is provided below. More details on nonwage cost factor findings are available in the Navigant's evaluation report in Appendix B. As with the SOC code and base wage values above, the Recommendations section of the report provides a comprehensive list of the recommended adjustments.

Nonwage cost factors in statute

Payroll Taxes and Benefits factor

The Payroll Taxes and Benefits factor as it was defined in statute was well aligned with the results of the evaluation, and no changes are recommended. In interpreting the factor in statute, DHS included the most recently reported nursing facility cost report data on payroll taxes, health related benefits, paid time off, and

training costs, and these costs aligned very closely with the results of the provider wage and cost survey. DHS recommends using this factor as it is defined in statute.

General and Administrative factor

DHS recommends changes to the General and Administrative factor as it is defined in statute. The formula in statute compares administrative costs to overall operating expenses, whereas the other cost factors in statute are compared to (and calculated against) direct worker costs. The General and Administrative factor in statute should reflect costs as calculated as a percentage of direct care worker wages, salaries, and benefits. The findings indicate that the value for this factor should be 14.4 percent, which is the median General and Administrative cost from the results of the provider wage and cost survey. DHS recommends replacing the General and Administrative factor as it is defined in statute with the factor value of 14.4 percent.

Another finding related to the General and Administrative factor is that the 20 percent factor value for adult day services named in statute should be removed. The evaluation findings indicate that all services should receive the same General and Administrative factor value. The study recommends that additional factors be applied to the rate for adult day services to reflect the service's unique facility, equipment, supply, and transportation costs. Those new factors, which were not named in statute, will be addressed below, in this section.

Program Plan Support factor

The Program Plan Support factor value was defined as 12.8 percent in statute, and did not vary by service or service type. The evaluation findings indicate that this factor value should vary by service type to reflect differences between services in terms of unbillable time. The evaluation also recommends that the Program Plan Support Factor should not be included in the adjusted base wage value of the supervisor, as is directed by the methods in the current statute.

Registered Nurse Management and Supervision, and Social Worker factors (Supervision factors)

The Supervision factors were defined in statute as the value of 15 percent of the adjusted base wage of a registered nurse or a social worker. The evaluation found that 15 percent is an appropriate value. Fifteen percent translates to a ratio of approximately 1 supervisor for every 7 direct care staff. However, the study findings suggested some changes are needed with respect to the type of supervisor assigned to each service and how the factor is calculated.

The findings indicate that an unlicensed supervisor factor would better reflect service requirements and staffing practices than a social worker for chore, companion, and homemaker. The details of the factor, including the SOC code, are in the next section of the report. For similar reasons, the findings indicate that the supervisor factor for ICLS should be a registered nurse rather than a social worker.

As was stated above, the findings also recommend that the Program Plan Support Factor should not be included in the adjusted base wage value of the supervisor, as is directed by the methods in the current statute.

Staffing Ratio factor

The statute assumed a 1 to 1 staff to participant ratio in all services, including adult day bath, but defined a staffing ratio of 1 to 4 for adult day and family adult day services. The evaluation findings indicate that the adult day staffing ratio should be 1 to 5, to reflect [Administrative Rule 9555.9690](https://www.revisor.mn.gov/rules/9555.9690)² and staffing levels reported in the provider wage and cost survey. Adult day bath and all other services should continue to reflect a 1 to 1 ratio.

Cost of Meals factor

A \$0.63 per 15-minute cost of meals factor was defined in statute to support the cost of meals and snacks in adult day services. The provider wage and cost survey and other evaluation findings support replacing this stand-alone meals factor with a Food, Supplies, and Transportation factor for adult day. This new factor, which was not named in statute, will be addressed below, later in this section.

Nonwage cost factors, not in statute

Adult Day Facility and Equipment factor

The statute defined a 20 percent general and administrative (G&A) factor for adult day and adult day bath, whereas all other services received a factor value based on nursing facility cost report data. For January 1, 2019, the G&A factor for all other services was calculated with a result of 8.66 percent. The reason for the higher G&A value for adult day was not stated in statute, but the evaluation presumed it was to address facility and other program related expenses unique to the service.

The provider wage and cost survey found that the median value for facility and equipment costs for adult day services was 16.20 percent. It is important to note that these costs are over and above the standard G&A factor. DHS recommends that the facility and equipment factor value should be applied to adult day and adult day bath in addition to the 14.4 percent G&A factor.

Adult Day Food, Supplies, and Transportation factor

Similar to the Facility and Equipment factor above, the evaluation looked at adult day meal costs in the provider wage and cost survey. The evaluation also looked at providers' supply and transportation costs related to delivering the service. The transportation costs addressed by this factor reflect the costs incurred by providers during the program day. Transportation to and from the day center is a separate service, and is separately authorized and billed. The findings indicate that a separate, additional factor based on the median food, supplies and transportation costs be applied for adult day services. The provider wage and cost survey found a median value of 19.01 percent for this factor. DHS recommends that this factor value be augmented to 24.0 percent which is the 70th percentile result from the wage and cost survey. This is an option Navigant named in its final evaluation report. This higher factor value will help providers pay for transportation options to support

² <https://www.revisor.mn.gov/rules/9555.9690/>

community engagement opportunities for adult day participants beyond the program site, to align with the HCBS Settings Rule. DHS also recommends that this factor replace the cost of meals add-on of \$0.63 per 15-minute unit that is currently in statute.

In-Home Services Supplies and Transportation factor

As with adult day services, the provider cost and wage survey looked at costs other providers reported that were outside the scope of the cost factors in statute. For in-home services such as chore, companion, and homemaker, the survey found non-food supply costs and transportation costs that were not accounted for in the current statute. The transportation costs are most critical, as in-home service providers drive from home to home to serve their participants. The evaluation indicates that a separate factor based on the median supplies and transportation costs should be applied to the following services: companion, chore, homemaker, ICLS, and in- and out-of-home respite. The survey found a factor value of 1.56 percent.

Adult Day and In-Home Services Participant Absence factor

Costs associated with participant absences were mentioned by a number of stakeholders that participated in the rates evaluation process. The provider wage and cost survey did not directly address this topic. The evaluation recommends that the absence factor value of 4.5 percent be used for adult day services based on a recent [report](#)³ issued by the DHS Disability Services Division, and that DHS conduct further study on this topic.

DHS recommends that the same participant absence factor of 4.5 percent be applied to in-home services, including chore, companion, homemaker, ICLS, and in- and out-of-home respite. Further analysis is needed to determine whether this factor value should vary by service, but applying a consistent factor will acknowledge that participant absence drive some costs within these services.

C. Home delivered meals rate

The statute did not include a method for calculating the rate for home delivered meals. Instead, the statute stated a new rate for the service effective January 1, 2019, which was \$9.30. Under current statute, as with all of the other services, this rate value was blended with the rate in effect on June 30, 2017 to derive the new rate for the service effective January 1, 2019 (see Minnesota Statutes 2018, section [256B.0915, Subdivision 12](#))⁴. In addition to defining the rate value at \$9.30, the statute put in place a method for adjusting the rate over time, by linking the rate to changes in the dietary per diem costs in nursing homes (see Minnesota Statutes, section [256.0915, Subdivision 16 \(l\)](#))⁵.

³ https://mn.gov/dhs/assets/2018-01-DWRS-absence-factor-report_tcm1053-323920.pdf

⁴ <https://www.revisor.mn.gov/statutes/cite/256B.0915>

⁵ Ibid.

The provider wage and cost survey found that the median cost per meal for providers of home delivered meals was \$8.17. DHS recommends that this value replace the value of \$9.30 in statute. The evaluation also found that the use of the dietary per diem in nursing facilities was appropriate and effective way to adjust this rate over time, as this method accounts for increases in both food and non-food costs. DHS recommends that this cost adjustment method remain in statute, and that the rate value for home deliver meals be adjusted effective January 1, instead of July 1, to align with adjustments to other service rates.

D. Adult day services participant acuity and staffing levels

The statute assumed a 1 to 4 staff to participant ratio for adult day services. The evaluation looked at how other states address participant acuity and staffing levels in their administration of adult day services and at participant acuity and staffing patterns reported in the Minnesota provider wage and cost survey.

Adult day participant acuity and staffing findings from other states

The evaluation selected and analyzed 11 other states to find examples of how participant acuity and staffing levels are accounted for in adult day service regulations and rates. Some stakeholders have been advocating for a tiered rate structure for adult day based on resident acuity, where a higher rate would be paid for participants with higher needs that require more staff support (and possibly more staff training or qualifications). More information about this topic can be found in the evaluation report prepared by Navigant, which is included as Appendix B.

While many states have a blended approach like Minnesota, where social and health-related supports are regulated under one adult day service and license, one alternative regulatory and rate structure is to define two separate services. A typical delineation is Adult Day Social and Adult Day Health, with the second model offering services to participants with more health related needs, or other complex needs. In states where there are two service models, there are generally at least two rates, with the health model getting a higher rate. However, it is important to note that the health model, and its higher rate, also involve higher regulatory expectations and requirements.

There are at least two states that have a single license for adult day but also have a tiered rate structure based on participant acuity (or higher level of service delivery based on need): Massachusetts and Wyoming. Massachusetts defines two levels, basic and complex, whereas Wyoming defines three levels, basic, intermediate, and high. While the states have one license governing these tiered service and rate structures, there are clear provisions in the license that state the expectations and requirements for each tier. As one would expect, the upper tiers come with additional requirements.

The findings of the study show that DHS' adult day service model and rate structure is very similar to administrative models in other states. Further study would be needed if Minnesota were to consider a tiered regulatory and rate structure for this service. DHS also agrees with the finding that any tiered rate structure would need be supported complimentary regulatory expectations and requirements.

Minnesota provider wage and cost survey findings

The provider wage and cost survey included questions about adult day staffing levels and the needs of participant groups served at adult day centers. The survey used cognitive impairment as a proxy for higher need participants since adult day services is known to serve many individuals with dementia, Alzheimer's, or other forms of cognitive impairment. Respondents were asked to report their typical staffing levels for adult day populations with dementia or Alzheimer's as compared to their staffing levels for participants with little or no cognitive impairment. Contrary to what was expected, staffing ratios for dementia or Alzheimer's participants was found to be 1 to 6, whereas staffing ratios for participants with little or no cognitive impairment was 1 to 5.

Some respondents did report staffing ratios under 1 to 5. But just as many respondents reported ratios above 1 to 5. Other respondents reported staffing ratios at the median value of 1 to 5.

[Administrative Rule 9555.9690⁶](#) requires staffing ratios between 1 to 5 and 1 to 8, based on service participants' ability to help themselves in the case of an emergency, such a fire at the facility. DHS recommends that the rate setting methods use a staffing ratio of 1 to 5. This is the highest staff to participant ratio in the Administrative Rule and would begin to reflect that some providers are serving participants with higher needs.

D. Adult day services demand projections

Demand projections for adult day services were prepared by Navigant using program and claims data for EW, Alternative Care (AC), and Essential Community Supports (ECS) from state fiscal years 2015 to 2017, and US Census data and population projections for Minnesota from 2015 to 2050. Projections were developed for state fiscal years 2018 to 2022.

Utilization of adult day services varied little by participants' level of care needs (i.e. acuity) as compared to participants' age and sex. Because of this, Navigant was able to develop projections for future service utilization based on age and sex based and population projections by age and sex. Based on patterns observed in the past three years, the future demand for the service is as follows:

- 6 percent annual increase in utilization for EW and ECS, 2019-2022, and
- 2 percent annual increase in utilization for AC, 2019-2022.

More information about this topic can be found in the evaluation report prepared by Navigant, which is included as Appendix B.

⁶ <https://www.revisor.mn.gov/rules/9555.9690/>

V. Report recommendations

The legislature specifically asked for recommendations on the following items:

- (1) base wages in subdivision 14, to determine if the standard occupational classification codes for each rate and component rate are an appropriate representation of staff who deliver the services;
- (2) factors in subdivision 15, and adjusted base wage calculation in subdivision 16, to determine if the factors and calculations appropriately address nonwage provider costs; and
- (3) the report shall address the impact of the new rates on the workforce situation and client access to services.

By adjusting the rate-setting methods as proposed below, we can help ensure that the service rates are “consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers”, as required by the federal government, and available for public program participants into the future.⁷ Implementing the recommendations below will also strengthen the long term care workforce, as the rates will be aligned with Bureau of Labor Statistics (BLS) wage data. As the BLS wage values increase overtime, so will the service rates.

Recommendations for base wages and SOC codes

| Current base wage in statute by service | Recommendation |
|---|---|
| Adult Day Services / Adult Day Bath 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) | 75% home health aides (SOC code 31-1011) 25% nursing assistants (SOC code 31-1014) |
| Chore 100% landscaping and groundskeeping workers (SOC code 37-3011) | 50% landscaping and groundskeeping workers (SOC code 37-3011) 50% maids and housekeeping cleaners (SOC code 37-2012) |
| Companion Service 50% personal and home care aides (SOC code 39-9021) 50% maids and housekeeping cleaners (SOC code 37-2012) | 80% personal and home care aides (SOC code 39-9021) 20% maids and housekeeping cleaners (SOC code 37-2012) |

⁷ Social Security Act, Title XIX, Section 1902(a)30(A)

| Current base wage in statute by service | Recommendation |
|--|---|
| <p>Homemaker – Cleaning 60% personal and home care aide (SOC code 39-9021) 20% nursing assistants (SOC code 31-1014) 20% maids and housekeeping cleaners (SOC code 37-2012)</p> | <p>100% maids and housekeeping cleaners (SOC code 37-2012)</p> |
| <p>Homemaker – Assistance with Personal Care / Home Management 60% personal and home care aide (SOC code 39-9021) 20% nursing assistants (SOC code 31-1014) 20% maids and housekeeping cleaners (SOC code 37-2012)</p> | <p>50% nursing assistants (SOC code 31-1014) 50% personal and home care aides (SOC code 39-9021)</p> |
| <p>Individual Community Living Support 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014)</p> | <p>60% Social and Human Service Assistants (SOC code 21-1093) 40% nursing assistants (SOC code 31-1014)</p> |
| <p>Respite – In-Home 5% registered nurses (SOC code 29-1141) 75% nursing assistants (SOC code 31-1014) 20% licensed practical and licensed vocational nurses (SOC code 29-2061)</p> | <p>75% home health aides (SOC code 31-1011) 15% registered nurses (SOC code 29-1141) 10% licensed practical and licensed vocational nurses (SOC code 29-2061)</p> |
| <p>Respite – Out-of-Home 5% registered nurses (SOC code 29-1141) 75% nursing assistants (SOC code 31-1014) 20% licensed practical and licensed vocational nurses (SOC code 29-2061)</p> | <p>75% home health aides (SOC code 31-1011) 15% registered nurses (SOC code 29-1141) 10% licensed practical and licensed vocational nurses (SOC code 29-2061)</p> |
| <p>Registered Nurse 100% registered nurses (SOC code 29-1141)</p> | <p>No change.</p> |
| <p>Social Worker 100% medical and public health social workers (SOC code 21-1022)</p> | <p>Replace with: Supervisor of Personal Service Workers 100% First-Line Supervisors of Personal Service Workers (SOC code 39-1021)</p> |

| Current base wage in statute by component service | Recommendation |
|--|--|
| Home Management and Support 33.33% personal and home care aide (SOC code 39-9021) 33.33% food preparation workers (SOC code 35-2021) 33.34% maids and housekeeping cleaners (SOC code 37-2012) | No change. |
| Home Care Aide 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) | 75% home health aides (SOC code 31-1011) 25% nursing assistants (SOC code 31-1014) |
| Home Health Aide 20% licensed practical and licensed vocational nurses (SOC code 29-2061) 80% nursing assistants (SOC code 31-1014) | 33.33% licensed practical and licensed vocational nurses (SOC code 29-2061) 33.33% nursing assistants (SOC code 31-1014) 33.34% home health aides (SOC code 31-1011) |
| Medication Setups by Licensed Practical Nurse 10% licensed practical and licensed vocational nurses (SOC code 29-2061) 90% registered nurses (SOC code 29-1141) | 25% licensed practical and licensed vocational nurses (SOC code 29-2061) 75% registered nurses (SOC code 29-1141) |
| Socialization The home management and support services component rate shall be used for payment for socialization and transportation component rates under elderly waiver customized living. | No change. |
| Transportation The home management and support services component rate shall be used for payment for socialization and transportation component rates under elderly waiver customized living. | No change. |

Recommendations for nonwage cost factors

| Current factor in statute | Recommendation | Recommended Value |
|-----------------------------------|----------------|--|
| Payroll Tax & Benefits | No change. | Use the result of the calculation defined in Minnesota Statute 256B.0915, Subd. 15., (1) |

| Current factor in statute | Recommendation | Recommended Value |
|--|---|--|
| General and Administrative | Change the formula in statute so that the factor is calculated as a percentage of direct care worker wages, salaries, and benefits. Use the median provider wage and cost survey result for this value. | 14.4%, for all services addressed in the current statute. |
| General and Administrative for Adult Day Services | Remove the 20% general and administrative factor for adult day services in statute and apply the standard general and administrative factor. | 14.4% |
| Program Plan Support | Vary factor by service type to reflect differences between services in terms of unbillable time. | 10.0 percent for adult day, adult foster care, and customized living 15.5 percent for all other services addressed in the current statute |
| Registered Nurse Management and Supervision | Change the factor calculation to remove the Program Plan Support value from the supervisor's adjusted base wage. For Independent Community Living Support, replace the social worker supervision factor with a registered nurse. Adult day, in- and out-of-home respite, and all of the residential component services should continue to have a registered nurse for the supervision factor. | Use the result of the calculation defined in Minnesota Statute 256B.0915, Subd. 15., (1), except remove Program Plan Support factor |
| Social Worker Supervision | Replace the social worker with an unlicensed supervisor position to better reflect service requirements and staffing practices. Apply this value to the following services, instead of the registered nurse or social worker factors: chore, companion, and homemaker. | 15 percent of First-Line Supervisor of Personal Service Workers (SOC 39-1021) plus the Payroll Taxes and Benefits factor |
| Staffing Ratio | Change the adult day staffing ratio in statute from 1 staff to 4 participants to 1 to 5, to reflect Administrative Rules for the service and staffing levels reported in the provider wage and cost survey. Adult day bath and all other services will have a 1 to 1 ratio. | 1 to 5 staff to participant ratio for adult day services |
| Adult Day Cost of Meals | Remove the \$0.63 per 15-minute cost of meals factor from adult day services and adult day bath. Replace this factor with the Food, Supplies, and Transportation factor below. | No value. Remove from statute. |

| Nonwage cost factors <u>not</u> in statute | Recommendation | Recommended Value |
|--|---|-------------------|
| Adult Day Facility and Equipment | Use a separate factor based on the median facility and equipment cost for adult day services from the provider wage and cost survey. | 16.20 percent |
| Adult Day Food, Supplies, and Transportation | Use a separate factor based on the median food, supplies and transportation cost for adult day services from the provider wage and cost survey. Remove the cost of meals add-on of \$0.63 per 15-minute unit for adult day. | 24.0 percent |
| In Home Services Supplies and Transportation | Use a separate factor based on the median supplies and transportation cost based on the provider wage and cost survey results. Apply the factor to companion, chore, homemaker, ICLS, and in- and out-of-home respite. | 1.56 percent |
| Adult Day and In Home Services Participant Absence | Use an absence factor of 4.5 percent based on a recent report ⁸ issued by the DHS Disability Services Division. Apply the factor to adult day, chore, companion, homemaker, ICLS, and in- and out-of-home respite. | 4.5 percent |

Recommendations for calculating the rates

The language in the 2017 statute provides some guidance about how the rates should be calculated mathematically, including some guidance on the order of mathematical operations. Based on rate evaluation findings, DHS recommends the following rate calculation changes:

- The adjusted base wage for the service should include the following components:
 - Payroll Tax and Benefits (for all services)
 - Program Plan Support (for all services)
 - Participant Absence (for adult day, chore, companion, homemaker, ICLS, and in- and out-of-home respite)
 - Adult Day Staffing Ratio (for adult day)
- The adjusted base wage for the supervision factor should include Payroll Tax and Benefits (for all services)
- The following cost factors should be applied to the sum of the adjusted base wage for the service and the adjusted base wage of the supervisor:
 - General and Administrative (for all services)
 - Facility and Equipment Factor (for adult day)

⁸ https://mn.gov/dhs/assets/2018-01-DWRS-absence-factor-report_tcm1053-323920.pdf

- Food, Non-Food Supplies and Transportation Factor (for adult day)
- Non-Food Supplies and Transportation Factor (for chore, companion, homemaker, ICLS, and in- and out-of-home respite)

These recommended changes are reflected in the Implementation section below.

Recommendations for the home delivered meals rate

DHS recommends that \$8.17 replace the value of \$9.30 in statute for the home delivered meals rate. DHS also recommends that the cost adjustment method for this service remain in statute, but that the rate value for home delivered meals be adjusted effective January 1, instead of July 1, to align with the timeline for inflationary adjustments for other services.

Recommended rate values based on the recommended methods

The following tables show the rate values by service and by residential component service for January 1, 2019 and the rate values that DHS recommendations would yield if they were fully adopted and fully implemented. Please note that the DHS Recommendations values are based on current BLS wage data and nursing facility cost data.⁹ If new BLS data or nursing facility cost data were used in a future year, these rate values will change.

| Service | Unit | 1/1/2019 Rates | DHS Recommendations | % Difference |
|--|----------------|----------------|---------------------|--------------|
| Adult Day Service | 15 Minutes | \$3.45 | \$4.32 | 25.2% |
| Adult Day Service - FADS | 15 Minutes | \$3.45 | \$4.32 | 25.2% |
| Adult Day Service Bath | 15 Minutes | \$7.65 | \$10.51 | 37.4% |
| Chore Services | 15 Minutes | \$4.15 | \$7.50 | 80.6% |
| Companion Services | 15 Minutes | \$2.57 | \$6.36 | 147.4% |
| Home Delivered Meals | 1 Meal Per Day | \$6.81 | \$8.17 | 20.0% |
| Homemaker / Assistance with Personal Cares | 15 Minutes | \$4.84 | \$7.14 | 47.6% |
| Homemaker Services / Cleaning | 15 Minutes | \$4.84 | \$6.72 | 38.9% |
| Homemaker Services / Home Management | 15 Minutes | \$4.84 | \$7.14 | 47.6% |

⁹ 1/1/2019 Rates and DHS Recommendations rate values are supported by the following data: Federal Fiscal Year 2016 Minnesota Nursing Facility Cost Report data prepared on 2/23/2018 and Bureau of Labor Statistics May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates for Minneapolis-St. Paul-Bloomington, MN-WI released on 3/30/2018.

| Service | Unit | 1/1/2019 Rates | DHS Recommendations | % Difference |
|--------------------------------------|------------|----------------|---------------------|--------------|
| Individual Community Living Supports | 15 Minutes | \$6.10 | \$9.38 | 53.9% |
| Respite Care Services, in Home | 15 Minutes | \$5.77 | \$9.88 | 71.3% |
| Respite Care Services, in Home | Daily | \$103.85 | \$177.81 | 71.2% |
| Respite Care Services, out of Home | 15 Minutes | \$5.77 | \$9.88 | 71.3% |
| Respite Care Services, out of Home | Daily | \$103.85 | \$177.81 | 71.2% |

| Residential Service Component Services | Unit | 1/1/2019 Rates | DHS Recommendations | % Difference |
|---|----------|----------------|---------------------|--------------|
| Home Management / Support Services | Per Hour | \$17.84 | \$27.93 | 56.5% |
| Home Care Aide | Per Hour | \$23.72 | \$30.21 | 27.4% |
| Home Health Aide | Per Hour | \$27.04 | \$35.27 | 30.5% |
| Medication setups by licensed Nurse | Per Hour | \$33.97 | \$53.90 | 58.7% |
| Socialization (1 staff to 1 resident ratio) | Per Hour | \$17.84 | \$27.93 | 56.5% |
| Transportation (1 rider) | Per Hour | \$17.84 | \$27.93 | 56.5% |

Recommendations for implementing the new methods

Implement the new rate values without blending them with June 30, 2017 rates

The rate-setting methods enacted in 2017 were phased in by blending 10 percent of the rate values from the new methods with 90 percent of the rate values as of June 30, 2017 (Minnesota Statutes section [256B.0915, Subdivision 12](#))¹⁰. DHS recommends that the new methods and rate values be implemented without blending them with rates from June 30, 2017 or any other prior rates. Blending the rate values derived from the new methods with rate values as of June 30, 2017 has a disproportionately negative impact on services that have lower rates compared to the results of the new methods (e.g. chore and companion services). If the new methods and rate values cannot be fully implemented, we recommend implementing rate values derived from the new methods at less than 100 percent, and pursuing 100 percent implementation over time. However, if the

¹⁰ <https://www.revisor.mn.gov/statutes/cite/256B.0915>

rate methods are partially implemented, DHS recommends that the implementation not result in a rate reduction for any individual services.

Update rate method values and rate calculations every two years

DHS recommends implementing the new rates on January 1, 2020. DHS recommends that base wage values be updated every two years based on the most recent and available Bureau of Labor Statistics (BLS) average hourly wages for the Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area. Updated base wage data will help ensure that direct service and supervisor wages in the methods reflect current wage data for the same or similar occupations. DHS also recommends that the Payroll Tax and Benefit factor be updated at the same time based on the most recent and available Minnesota nursing facility cost report data.

DHS recommends that in years when rate method values are updated, service rates will be recalculated using the new values. The recalculation of the methods would yield news rates that would take effect every two years on January 1.

Conduct an evaluation of rate methods and rates values by January 1, 2021

DHS recommends building upon the current evaluation by conducting further evaluation in future years to determine how the recommended methods are performing and to recommend changes to the rate values as needed to align with provider wages and costs. In addition to evaluating current components of the rate methodology, the evaluation would also provide further information on specific areas of cost, such as program plan support (i.e. non-billable time) and participant absences. DHS recommends submitting a report to the legislature with further recommendations by January 1, 2021.

Recommendations for aligning the aging and disability waiver programs

Several services addressed in Minnesota Statutes section [256B.0915, Subdivisions 11-16¹¹](https://www.revisor.mn.gov/statutes/cite/256B.0915) are also provided through disability waiver programs. However, under current law the rate-setting methods and rate values for these services only apply to the aging programs, with the exception of customized living component rates, which currently apply to customized living under CADI and BI.

DHS recommends that the rate-setting methods and rate values for the following additional services be applied to the disability waiver programs effective January 1, 2020:

- Chore
- Home delivered meals
- Homemaker – cleaning

¹¹ <https://www.revisor.mn.gov/statutes/cite/256B.0915>

- Homemaker – assistance with personal care and home management

VI. Implementation language

Minnesota Statutes, section 256B.0915 MEDICAID WAIVER FOR ELDERLY SERVICES

Subd. 11. **Payment rates; application.**

(a) The payment methodologies in subdivisions 12 to 16 apply to elderly waiver and elderly waiver customized living and foster care under this section, alternative care under section 256B.0913, essential community supports under section 256B.0922, ~~and community access for disability inclusion customized living, brain injury customized living, and elderly waiver foster care and residential care.~~

(b) The payment methodologies in subdivisions 12 to 16 apply to the following services to the extent these services are covered under disability waivers under sections 256B.49 and 256B.092.

(1) customized living

(2) chore

(3) home delivered meals

(3) homemaker/assistance with personal care

(4) homemaker/cleaning

(5) homemaker/home management

Subd. 12. **Payment rates implementation; ~~phase in~~ inflationary adjustment**

(a) Effective January 1, 2019, January 1, 2020 all rates and ~~rate~~ component rates for services under subdivision 11 shall be ~~the sum of ten~~ 100 percent of the rates calculated under subdivisions 13 to 16 ~~and 90 percent of the rates calculated using the rate methodology in effect as of June 30, 2017.~~

(b) On January 1, 2020, and every two years thereafter, the commissioner shall update the base wage index in subdivisions 14 based on the most recently available Bureau of Labor Statistics Minneapolis-St. Paul-Bloomington, MN-WI MetroSA data

(c) On January 1, 2020, and every two years thereafter, the commissioner shall update the payroll tax and benefit factor in subdivisions 14 (1) based on the most recently available nursing facility cost report data.

Subd. 13. **Payment rates; establishment.**

(a) When establishing the base wages according to subdivision 14, the commissioner shall use standard occupational classification (SOC) codes from the Bureau of Labor Statistics as defined in the edition of the Occupational Handbook published immediately prior to ~~January 1, 2019~~ implementation or recalculation of rates, using Minnesota-specific wages taken from job descriptions.

(b) ~~Beginning January 1, 2019, and every January 1 thereafter,~~ the commissioner shall establish factors, component rates, and rates according to subdivisions 15 and 16, using base wages established according to ~~paragraph (a) and~~ subdivision 14.

Subd. 14. Payment rates; base wage index.

(a) Base wages are calculated for customized living, and foster care, ~~and residential care~~ component services as follows:

(1) the home management and support services base wage equals 33.33 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for personal and home care aide (SOC code 39-9021); 33.33 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for food preparation workers (SOC code 35-2021); and 33.34 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(2) the home care aide base wage equals ~~50~~75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for home health aides (SOC code 31-1011); and ~~50~~25 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014);

(3) the home health aide base wage equals ~~20~~33.33 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for licensed practical and licensed vocational nurses (SOC code 29-2061); ~~and~~ ~~80~~33.33 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and 33.34 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for home health aides (SOC code 31-1011);

(4) the medication setups by licensed practical nurse base wage equals ~~ten~~25 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for licensed practical and licensed vocational nurses (SOC code 29-2061); and ~~90~~75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for registered nurses (SOC code 29-1141).

(b) Base wages are calculated for the following services as follows:

(1) the chore services base wage equals ~~100~~50 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for landscaping and groundskeeping workers (SOC code 37-3011); and 50 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(2) the companion services base wage equals ~~50~~80 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for personal and home care aides (SOC code 39-9021); and ~~50~~20 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(3) the homemaker ~~/services and~~ assistance with personal care base wage equals ~~60~~50 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for personal and home care aide (SOC code 39-9021); and 20~~50~~ percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~20~~ percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(4) the homemaker/ ~~services and~~ cleaning base wage equals ~~60~~ 60 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for personal and home care aide (SOC code 39-9021); ~~20~~ 20 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~20~~ 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(5) the homemaker/ ~~services and~~ home management base wage equals ~~60~~ 50 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for personal and home care aide (SOC code 39-9021); and ~~20~~ 50 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~20~~ 20 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for maids and housekeeping cleaners (SOC code 37-2012);

(6) the in-home respite care services base wage equals ~~five~~ 15 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for registered nurses (SOC code 29-1141); 75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for home health aides (SOC code 31-1011); ~~75~~ 75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~20~~ 10 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for licensed practical and licensed vocational nurses (SOC code 29-2061);

(7) the out-of-home respite care services base wage equals ~~five~~ 15 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for registered nurses (SOC code 29-1141); 75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for home health aides (SOC code 31-1011); ~~75~~ 75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~20~~ 10 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for licensed practical and licensed vocational nurses (SOC code 29-2061); and

(8) the individual community living support base wage equals ~~20~~ 20 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for licensed practical and licensed vocational nurses (SOC code 29-2061); and ~~80~~ 40 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014); and ~~60~~ 60 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for social and human services aide (SOC code 21-1093);

(9) the adult day service base wage equals 75 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for home health aides (SOC code 31-1011); and 25 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for nursing assistants (SOC code 31-1014);

(c) Base wages are calculated for the following values as follows:

(1) the registered nurse base wage equals 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for registered nurses (SOC code 29-1141); and

~~(2) the social worker base wage equals 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for medical and public health social workers (SOC code 21-1022).~~

(2) the unlicensed supervisor base wage equals 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI MetroSA average wage for supervisor of personal service workers (SOC code 39-1021).

(d) If any of the SOC codes and positions are no longer available, the commissioner shall, in consultation with stakeholders, select a new SOC code and position that is the closest match to the previously used SOC position.

Subd. 15. Payment rates; factors.

The commissioner shall use the following factors:

(1) the payroll taxes and benefits factor is the sum of net payroll taxes and benefits divided by the sum of all salaries for all nursing facilities on the most recent and available cost report;

(2) the general and administrative factor ~~is 14.4 percent is the sum of net general and administrative expenses minus administrative salaries divided by total operating expenses for all nursing facilities on the most recent and available cost report;~~

(3) the program plan support factor is ~~12.8~~ 10 percent for the following services to cover the cost of direct service staff needed to provide support for the ~~home and community-based~~ service when not engaged in direct contact with clients;:

(a) adult day service

(b) customized living

(c) foster care

(4) the program plan support factor is 15.5 percent for the following services to cover the cost of direct service staff needed to provide support for the service when not engaged in direct contact with clients:

(a) chore

(b) companion

(c) homemaker/assistance with personal care

(d) homemaker/cleaning

(e) homemaker/home management

(f) in-home respite care

(g) out-of-home respite care

(h) individual community living support

(5) the facility and equipment factor for adult day services is 16.2 percent.

(6) the food, supplies, and transportation factor for adult day services is 24.0 percent.

(7) the supplies and transportation factor for the following services is 1.56 percent:

(a) chore

(b) companion

(c) homemaker/assistance with personal care

(d) homemaker/cleaning

(e) homemaker/home management

(f) in-home respite care

(g) out-of-home respite care

(h) individual community living support

(8) the absence factor for the following services is 4.5 percent:

(a) adult day service

(b) chore

(c) companion

(d) homemaker/assistance with personal care

(e) homemaker/cleaning

(f) homemaker/home management

(g) in-home respite care

(h) out-of-home respite care

(i) individual community living support

~~(48)~~ the registered nurse management and supervision factor equals 15 percent of the product of the position's base wage and the sum of the factors in clauses ~~(1) to (3)~~; and

~~(59)~~ the ~~social worker~~ unlicensed supervisor supervision factor equals 15 percent of the product of the position's base wage and the sum of the factors in clauses ~~(1) to (3)~~.

Subd. 16. Payment rates; component rates.

(a) For the purposes of this subdivision, the "adjusted base wage" for a position equals the position's base wage plus:

(1) the position's base wage multiplied by the payroll taxes and benefits factor;

~~(2) the position's base wage multiplied by the general and administrative factor; and~~

~~(23)~~ the position's base wage multiplied by the applicable program plan support factor; and

~~(34)~~ the position's base wage multiplied by the absence factor, if applicable.

(b) For medication setups by licensed nurse, ~~registered nurse~~ the registered nurse management and supervision factor, and ~~social worker~~ the unlicensed supervisor supervision factor services, the component rate or factor value for each service equals the respective position's adjusted base wage.

(c) For home management and support services, home care aide, and home health aide services, the component rate for each service equals the sum of the respective position's adjusted base wage and plus the registered nurse management and supervision factor multiplied by the general and administrative factor and multiplied by the applicable factors in Subd. 15, items 5-7.

(d) The home management and support services component rate shall be used for payment for socialization and transportation component rates under elderly waiver customized living.

(e) The 15-minute unit rates for chore services and companion services are calculated as follows:

(1) sum the adjusted base wage for the respective position and the unlicensed supervisor supervision social worker factor. Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7; and

(2) divide the result of clause (1) by four.

(f) The 15-minute unit rates for homemaker/~~services and~~ assistance with personal care, homemaker/~~services and~~ cleaning, and homemaker/~~services and~~ home management are calculated as follows:

(1) sum the adjusted base wage for the respective position and the registered nurse management and unlicensed supervisor supervision factor. Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7; and

(2) divide the result of clause (1) by four.

(g) The 15-minute unit rate for in-home respite care services is calculated as follows:

(1) sum the adjusted base wage for in-home respite care services and the registered nurse management and supervision factor Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7; and

(2) divide the result of clause (1) by four.

(h) The in-home respite care services daily rate equals the in-home respite care services 15-minute unit rate multiplied by 18.

(i) The 15-minute unit rate for out-of-home respite care is calculated as follows:

(1) sum the out-of-home respite care services adjusted base wage and the registered nurse management and supervision factor Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7; and

(2) divide the result of clause (1) by four.

(j) The out-of-home respite care services daily rate equals the out-of-home respite care services 15-minute unit rate multiplied by 18.

(k) The individual community living support rate is calculated as follows:

(1) sum the adjusted base wage for ~~the home care aide rate in subdivision 14, paragraph (a), clause (2), individual community living support~~ and the ~~social worker~~ registered nurse management and supervision factor.

Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7; and

(2) divide the result of clause (1) by four.

(l) The home delivered meals rate equals ~~\$9.30~~\$8.17. ~~Beginning July 1, 2018,~~ the commissioner shall increase the home delivered meals rate on January 1, 2020, and every two years thereafter, July 1 by the percent increase in the nursing facility dietary per diem using the two most recent and available nursing facility cost reports.

~~(m) The adult day services rate is based on the home care aide rate in subdivision 14, paragraph (a), clause (2), plus the additional factors from subdivision 15, except that the general and administrative factor used shall be 20 percent. The nonregistered nurse portion of the rate shall be multiplied by 0.25, to reflect an assumed-ratio staffing of one caregiver to four clients, and divided by four to determine the 15-minute unit rate. The registered nurse portion is divided by four to determine the 15-minute unit rate and \$0.63 per 15-minute unit is added to cover the cost of meals.~~

(m) The 15-minute unit rate for adult day services is calculated as follows:

(1) divide the adjusted base wage for adult day services by 5 to reflect an assumed staffing ratio of one to five. Sum the result of this calculation and the registered nurse management and supervision factor. Multiply this second result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7;

(2) divide the result of clause (1) by four.

(n) The adult day services bath 15-minute unit rate is calculated as follows: ~~the same as the calculation of the adult day services 15-minute unit rate without the adjustment for staffing ratio.~~

—(1) sum the adjusted base wage for adult day services and the registered nurse management and supervision factor. Multiply the result by the general and administrative factor and by the applicable factors in Subd. 15, items 5-7;

(2) divide the result of clause (1) by four.

(o) If a bath is authorized for an adult day services client, at least two 15-minute units must be authorized to allow for adequate time to meet client needs. Adult day services may be authorized for up to 48 units, or 12 hours, per day based on client and family caregiver needs.

~~Subd. 17. Evaluation of rate methodology.~~

~~The commissioner, in consultation with stakeholders, shall conduct a study to evaluate the following:~~

~~(1) base wages in subdivision 14, to determine if the standard occupational classification codes for each rate and component rate are an appropriate representation of staff who deliver the services; and~~

~~(2) factors in subdivision 15, and adjusted base wage calculation in subdivision 16, to determine if the factors and calculations appropriately address nonwage provider costs.~~

~~By January 1, 2019, the commissioner shall submit a report to the legislature on the changes to the rate methodology in this statute, based on the results of the evaluation. Where feasible, the report shall address the~~
Evaluation of Rate Methodology for Services Provided under Elderly Waiver and Related Programs

~~impact of the new rates on the workforce situation and client access to services. The report should include any changes to the rate calculations methods that the commissioner recommends.~~

Uncodified language

The commissioner, in consultation with stakeholders, shall conduct a study to evaluate the following:

- (1) The rate methodology base wage values compared to wages paid by service providers;
- (2) The rate methodology non-wage cost factor values compared to the nonwage costs of service providers;
- (3) The extent to which non-wage cost factors and factor values should vary by service.

By January 1, 2021, the commissioner shall submit a report to the legislature with recommended adjustments to the rate methodologies in 256B.0915, Subd. 11-16, based on the results of the evaluation.

VII. Appendix

Appendix A

Rate Evaluation Stakeholder Group

| Organization | Representative(s) |
|--|---|
| Aging Services for Communities | Karen Hiscox |
| Care Providers of Minnesota | Todd Bergstrom; Jill Schewe |
| Como Living at Home Block Nurse Program | Lisa Kane |
| ElderCircle | Rinna Waters |
| Help at Your Door | Karen Cotch; Dawn Germscheid |
| LeadingAge Minnesota | Jeff Bostic; Bobbie Guidry |
| Lutheran Social Service of Minnesota | Catherine Blonigen; Sara Koch; Nicole Bauer |
| Mahube-Otwa Community Action Partnership | Karen E. Lenius; Rhonda Wilson |
| Metro Meals on Wheels Association | Mary Plasencia |
| Minnesota Association of Senior Nutrition Services | Marilyn Ocepek |
| Northwoods Caregivers | Missy Thomas |
| North End-South Como Block Nurse Program | Molly Fitzel |
| Senior Community Services | Deb Taylor |

Appendix B

The following pages are the Navigant report. The Navigant report was screened and adapted to meet DHS accessibility standards.



Evaluation of Rate Methodologies for Elderly Waiver and Related Programs

Prepared for:
Minnesota Department of Human Services

November 27, 2018

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Executive Summary

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Appendix A: Base Wage and Additional Cost Factors by Service per Statute

Appendix B: Rate Formulas per Minnesota Statute

Appendix C: Adult Day Projections

Appendix D: Summaries of Selected Other States' Adult Day Reimbursement Methodologies

Executive Summary

In 2017, the Minnesota State Legislature established new methodologies for determining rates for selected home and community-based services (HCBS) provided under the State's Elderly Waiver (EW), Alternative Care (AC), and Essential Community Supports (ECS) programs, and Brain Injury (BI) and Community Access for Disability Inclusion (CADI) programs (Laws of Minnesota, 2017 1st Special Session, Chapter 6, Article 3, Sections 13-18). The new methodologies in Statute will go into effect on January 1, 2019 and will constitute 10 percent of the total rate. The 2017 legislation required that the Minnesota Department of Human Services (DHS) evaluate the new methodology and submit a report to the State Legislature by January 1, 2019 that includes any recommended changes to the methodologies. DHS contracted with Navigant Consulting (Navigant) to assist with this evaluation and provide this written report to support DHS' development of the legislatively-mandated report.

Navigant's evaluation involved reviewing national and local independent data sources of HCBS costs, surveying providers regarding their base wage and nonwage costs, and reviewing DHS rate calculations based on the methodologies. DHS also contracted with Navigant to develop adult day demand projections and perform a targeted review of other states' reimbursement strategies for adult day services, with a focus on acuity and staff to participant ratios. Navigant worked closely with DHS and a Stakeholder Group, made up of HCBS providers and representatives from Minnesota HCBS-related provider associations, from February 2018 through October 2018 to accomplish this work. The Navigant team included the National Association of States United for Aging and Disabilities (NASUAD), which conducted the targeted review of other states' reimbursement strategies for adult day services.

The services included in Navigant's evaluation were:

- Adult day (AC, EW, ECS)
- Chore (AC, EW, ECS)
- Companion (AC, EW)
- Customized living (BI, CADI, EW)
- Foster care (EW)
- Home delivered meals (HDM) (AC, EW, ECS)
- Homemaker (AC, EW, ECS)
- Individual Community Living Support (AC, EW)
- Respite – in-home and out-of-home (AC, EW)

Generally speaking, the rate methodologies in Statute are consistent with the independent rate build-up approach used by many other states and by DHS' Disability Waiver Rate System (DWRS) to develop HCBS rates. Specifically, the rate methodologies include:

- Identifying base rates for each staff type using standard occupational classification (SOC) codes from the Bureau of Labor Statistics (BLS)
- Identifying the payroll taxes and benefit factor as the sum of net payroll taxes and benefits divided by the sum of all salaries for all nursing facilities on the most recent and available cost report

- Identifying the general and administrative (G&A) factor as the sum of net general and administrative expenses minus administrative salaries divided by the total operating expenses for all nursing facilities on the most recent and available cost report. For adult day services, the G&A factor is set at 20 percent.
- Using a program plan support factor of 12.8 percent to cover the cost of direct service staff needed to provide support for the home and community-based services (HCBS) service when not engaged in direct contact with clients
- Using a registered nurse management and supervision factor equal to 15 percent of the product of the position's base wage and the sum of the payroll taxes and benefit factor, general and administrative factor and program plan support factor
- Using a social worker supervision factor equal to 15 percent of the product of the position's base wage and the sum of the payroll taxes and benefit factor, G&A factor and program plan support factor
- Adjusting the nonregistered nurse portion of the non-bath adult day service rate to reflect a staffing ratio of one caregiver to four residents
- Applying \$0.63 per 15-minute unit of adult day services to cover the cost of meals.

Navigant's recommendations related to the rate methodologies are summarized in Tables 1 through 4 on the following pages:

Table 1: Direct Care Worker Wage Recommendations by Non-Residential Service

Table 2: Direct Care Worker Wage Recommendations by Residential Component Service

Table 3: Summary of Recommendations for Factors Currently in Statute

Table 4: Summary of Recommendations for Home-Delivered Meals

Table 5: Summary of Recommendations for Factors Not Currently in Statute

The remainder of this report provides a detailed account of the rate evaluation process, including key analyses, calculation of specific rate components, and recommendations, and is organized as follows:

- *Section I: Background* – provides an overview of the evaluation and Navigant's approach to evaluating the rate components in Statute
- *Section II: Wage Analysis and Recommendations* – describes Navigant's evaluation of the base wages by service in Statute and related recommendations
- *Section III: Non-Wage Components* – describes Navigant's evaluation of the non-wage rate components in Statute, identifies other non-wage components for consideration, and provides related recommendations
- *Section IV: Home-Delivered Meals* – describes Navigant's evaluation of the HDM cost per meal in Statute and potential inflation factors, and provides related recommendations
- *Section V: Adult Day Demand Projections* – describes Navigant's development of projections for adult day services and costs and provides related observations
- *Section VI: Other States' Adult Day Reimbursement Methodologies* – describes selected states' adult day payment methodologies

Table 1: Direct Care Worker Wage Recommendations by Non-Residential Service

| Service | Recommended Change to SOC Code(s) | Recommended Change to SOC Code Percentages | Base Wage Based on SOC Code(s) in Statute | Base Wage Recommendation Based on SOC Code Changes ¹ |
|--|-----------------------------------|--|---|---|
| Adult Day | No | Yes | \$15.04 | \$14.33 |
| Chore | Yes | Yes | \$17.05 | \$15.23 |
| Companion | No | Yes | \$12.87 | \$12.55 |
| Homemaker / Cleaning | Yes | Yes | \$13.37 | \$13.41 |
| Homemaker / Home Management or Personal Care | Yes | Yes | \$13.37 | \$14.40 |
| Individual Community Living Supports (ICLS) | Yes | Yes | \$15.04 | \$17.18 |
| Respite (both in-home and out-of-home) | Yes | Yes | \$18.87 | \$18.36 |

¹ Bureau of Labor Statistics. May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates for Minneapolis-St. Paul-Bloomington, MN-WI, released on March 30, 2018

Table 2: Direct Care Worker Wage Recommendations by Residential Component Service

| Component Service | Recommended Change to SOC Code(s) | Recommended Change to SOC Code Percentages | Base Wage Based on SOC Code(s) in Statute | Base Wage Recommendation Based on SOC Code Changes ² |
|---------------------------|-----------------------------------|--|---|---|
| Home Care Aide | No | Yes | \$15.04 | \$14.33 |
| Home Health Aide | Yes | Yes | \$17.73 | \$17.44 |
| Home Management | No | No | \$12.84 | No Change |
| Individual Transportation | No | No | \$12.84 | No Change |
| Medication Setup | No | Yes | \$37.55 | \$30.98 |
| Socialization | No | No | \$12.84 | No Change |

² Bureau of Labor Statistics. May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates for Minneapolis-St. Paul-Bloomington, MN-WI, released on 3/30/2018

Table 3: Summary of Recommendations for Factors Currently in Statute

| Factor | Current Statute | Recommended Change |
|-------------------------------|--|--|
| Payroll Tax & Benefits | 22.08 percent <i>(as calculated by DHS)</i> | <ul style="list-style-type: none"> No change As calculated by DHS, this factor includes paid time off (PTO) and training costs, in addition to payroll taxes and benefits |
| General & Administrative | 8.66 percent for non-adult day services <i>(as calculated by DHS)</i> 20 percent for adult day services | <ul style="list-style-type: none"> Change formula in Statute so that the factor is calculated as a percentage of direct care worker wages, salaries, and benefits as this factor is multiplied by the base wage Use the median cost survey result of 14.4 percent for all services and develop a separate factor for facility-related costs for adult day services Change the order of operations to apply the factor to the base wage plus benefits |
| Program Plan Support | 12.8 percent | <ul style="list-style-type: none"> Vary factor by service type to reflect differences between services in terms of unbillable time. Use a 10.0 percent factor for adult day services, customized living and adult foster care to allow for consistency between congregate settings of adult day and customized living Use a 15.5 percent factor for chore, companion, homemaker, ICLS, and respite (both in-home and out-of-home) based on MN Disability Waiver Rate System Consider additional study in the future Change the order of operations to apply the factor to the base wage plus benefits |
| Staffing Ratio | Assumed 1:1 for all services except for adult day which is assumed at 1:4 | <ul style="list-style-type: none"> Change to 1:5 for adult day services to reflect Minnesota Rules and staffing levels in survey data |
| Supervision – Supervisor Type | Service-specific: social worker (SW) ³ or registered nurse (RN) ⁴ | <ul style="list-style-type: none"> For chore, companion, and homemaker: Change the supervisor to BLS SOC “First Line Supervisors of Personal Service Workers” (SOC 39-1021) Assign an RN supervisor to the ICLS service instead of a SW |

³ Chore, companion, individual community living supports (ICLS)

⁴ Adult day (including bath), home management, socialization, homemaker, home care aide, home health aide, respite (both in-home and out-of-home), transportation

| Factor | Current Statute | Recommended Change |
|-------------------------------|---|---|
| Supervision – Span of Control | 15 percent of base wage, equal to a 1:7 ratio of supervisors to employees | <ul style="list-style-type: none"> No changes to the span of control |

Table 4: Summary of Recommendations for Home-Delivered Meals

| Service | Current Statute | Recommended Change |
|----------------------|-----------------|---|
| Home-Delivered Meals | \$9.30 | <ul style="list-style-type: none"> Change the cost per meal to the median cost survey data result of \$8.17 Apply the inflation factor to the \$8.17 cost Continue to use the NF Dietary Per Diem to calculate inflation, as defined in Statute. However, apply the inflation effective January 1 of each year, instead of July 1. |

Table 5: Summary of Recommendations for Factors Not Currently in Statute

| Factor | Recommended Change |
|---|--|
| <u>Adult Day Services: Facility and Equipment Factor</u> | <ul style="list-style-type: none"> Use a separate factor based on the median facility and equipment cost for adult day services from the provider survey data (16.20 percent) |
| <u>Adult Day Services: Food, Supplies (non-food), and Transportation Factor</u> | <ul style="list-style-type: none"> Use a separate factor based on the median food, supplies and transportation cost for adult day services from the provider survey data (19.01 percent) Remove the meal add-on of \$0.63 per 15 minutes for adult day meal costs currently in Statute |
| <u>Chore, Companion, Homemaker, ICLS and Respite Services (both in-home and out-of-home): Supplies (non-food) and Transportation Factor</u> | <ul style="list-style-type: none"> Use a separate factor based on the median supplies and transportation cost from the provider survey data (1.56 percent) |
| <u>Customized living and foster care services: Supplies (non-food) Factor</u> | <ul style="list-style-type: none"> Use a separate factor based on the median supplies cost from the provider survey data (3.39 percent) |
| <u>Absence Factor</u> | <ul style="list-style-type: none"> Use an absence factor of 4.5 percent for adult day services, as supported by the January 2018 Minnesota Legislative Report, <i>Disability Waiver Rate System Absence Factor in Day Services Study</i>.⁵ |

⁵ Minnesota Department of Human Services. Disability Waiver Rate System Absence Factor in Day Services Study. January 2018. Available online: https://mn.gov/dhs/assets/2018-01-DWRS-absence-factor-report_tcm1053-323920.pdf

Section I Background

In 2017, the Minnesota State Legislature established new methodologies for determining rates for selected home and community-based services (HCBS) provided under the State’s Elderly Waiver (EW), Alternative Care (AC), and Essential Community Supports (ECS) programs, and Brain Injury (BI) and Community Access for Disability Inclusion (CADI) programs (Laws of Minnesota, 2017 1st Special Session, Chapter 6, Article 3, Sections 13-18). The new methodologies in Statute will go into effect on January 1, 2019 and will constitute 10 percent of the total rate. The 2017 legislation required that the Minnesota Department of Human Services (DHS) evaluate the methodology and submit a report to the State Legislature by January 1, 2019 that includes any recommended changes to the new methodologies. DHS contracted with Navigant Consulting (Navigant) to assist with this evaluation and provide this written report to support DHS’ development of the legislatively-mandated report.

Navigant’s evaluation involved reviewing national and local independent data sources of HCBS costs, surveying providers regarding their base wage and nonwage costs, and reviewing DHS rate calculations based on the methodologies. DHS also contracted with Navigant to develop adult day demand projections and perform a targeted review of other states’ reimbursement strategies for adult day services. Navigant worked closely with DHS and a Stakeholder Group, made up of HCBS providers and representatives from Minnesota HCBS-related provider associations, from February 2018 through October 2018 to accomplish this work. The Navigant team included the National Association of States United for Aging and Disabilities (NASUAD), which conducted the targeted review of other states’ reimbursement strategies for adult day services.

The services included in Navigant’s evaluation were:

- Adult day (AC, EW, ECS)
- Chore (AC, EW, ECS)
- Companion (AC, EW)
- Customized living (BI, CADI, EW)
- Foster care (EW)
- Home delivered meals (HDM) (AC, EW, ECS)
- Homemaker (AC, EW, ECS)
- Individual Community Living Support (AC, EW)
- Respite – in-home and out-of-home (AC, EW)

1.1 Federal Requirements for HCBS Rate Development

States are required to develop rates for HCBS services that meet the standards of 1901(a)(30(A) of the Social Security Act. Specifically, rates must be:

“...consistent with efficiency, economy, and quality of care and...sufficient to enlist enough providers so that care and services are available under the plan at least to the extent that care and services are available to the general population in the geographic area.”

States must also ensure ongoing federal approval of rate methodologies funded by Medicaid, and state HCB waiver applications for these services must describe the policy and methods used in setting payment rates for each type of services (42 CFS 447.200-205).

1.2 Rate Methodology in Statute

Generally speaking, the rate methodologies in Statute are consistent with the independent rate build-up approach used by many other states and by DHS' Disability Waiver Rate System (DWRS) to develop HCBS rates. Under this approach, states develop assumptions for direct and indirect care components of services using a variety of data sources including provider cost and wage data. These assumptions produce dollar amounts for each component which are then summed to produce an overall rate, with adjustments as needed to reflect state policy goals and budgets. The new rate methodologies in Minnesota Statute include:

- Identifying base rates for each staff type using standard occupational classification (SOC) codes from the Bureau of Labor Statistics (BLS)
- Identifying the payroll taxes and benefit factor as the sum of net payroll taxes and benefits divided by the sum of all salaries for all nursing facilities on the most recent and available cost report
- Identifying the general and administrative (G&A) factor as the sum of net general and administrative expenses minus administrative salaries divided by the total operating expenses for all nursing facilities on the most recent and available cost report. For adult day services, the G&A factor is set at 20 percent.
- Using a program plan support factor of 12.8 percent to cover the cost of direct service staff needed to provide support for the home and community-based services (HCBS) service when not engaged in direct contact with clients
- Using a registered nurse management and supervision factor equal to 15 percent of the product of the position's base wage and the sum of the payroll taxes and benefit factor, general and administrative factor and program plan support factor
- Using a social worker supervision factor equal to 15 percent of the product of the position's base wage and the sum of the payroll taxes and benefit factor, G&A factor and program plan support factor
- Adjusting the nonregistered nurse portion of the non-bath adult day service rate to reflect a staffing ratio of one caregiver to four residents
- Applying \$0.63 per 15-minute unit of adult day services to cover the cost of meals.

Appendix A provides the base wage and cost factors by service under evaluation; Appendix B provides the rate formulas according to Statute.

1.3 Approach to Evaluation

Navigant reviewed the rate methodologies in Statute by service and compared those methodologies to industry benchmarks including analyses based on data from a Minnesota HCBS provider survey administered for purposes of this evaluation. As part of this review, Navigant examined the rate component values and overall rates as developed by DHS based

on the language in Statute. Navigant also developed an analysis of the demand for adult day services and performed a special review of adult day service reimbursement methodologies used by State Medicaid agencies nationwide. DHS contracted with Navigant to perform a separate study that included a review of adult day service requirements and service delivery models in Minnesota and nationwide.⁶

1.3.1 Role of Rate Evaluation Advisory Group

Navigant and DHS initiated a Rate Evaluation Stakeholder Group (Stakeholder Group) to provide feedback throughout the evaluation. This Stakeholder Group included HCBS providers and representatives from Minnesota HCBS-related provider associations. Monthly meetings focused on reviewing and providing feedback on the below topics:

- Initial research plan
- Pilot and final cost and wage survey tools
- Base wage findings
- Non-wage cost components
- Home-delivered meal costs
- Program plan support (unbillable time required to deliver HCBS services)
- Staffing ratios and supervisor span of control
- Adult day demand projections

This Stakeholder Group provided important perspective and feedback throughout the course of the analysis that informed Navigant's recommendations.

1.3.2 Provider Focus Groups

Navigant held two provider focus groups to collect additional information on the below key topics:

- Program plan support by service
- Staffing ratios by service
- Supervisor type and span of control by service

The discussions during these focus groups helped to support recommendations regarding the corresponding rate assumptions and allowed Navigant to obtain additional perspective and background on the topics discussed.

⁶ This study includes recommendations regarding changes to the current adult day services definition, and the identification of data-based measures that can be used to monitor the demonstrated impact of adult day services and related outcomes.

1.3.3 Data Sources

Navigant relied on a wide variety of data sources to develop this evaluation, including:

- Minnesota Medical Expenditure Panel Survey (Insurance Component) data (MEPS-IC), as compiled by the Agency for Healthcare Research and Quality (AHRQ)
- Bureau of Labor Statistics (BLS) average wages for Minnesota, by Standard Occupational Classification (SOC)
- State HCBS rate assumptions, as available publicly, and including assumptions from DWRS
- BLS Consumer Price Index: Food
- Minnesota nursing facility data, as collected and analyzed by DHS
- Rates for EW, AC and ECS as developed by DHS based on Statute
- Minnesota provider surveys
 - Cost and wage survey (developed and conducted for this analysis)
 - Home-delivered meal only survey (developed and conducted for this analysis)

The following subsection provides a detailed description of each data source.

Medical Expenditure Panel Survey Data

Navigant used Minnesota-specific 2017 MEPS-IC data to support the evaluation of the payroll and benefits factor described in Statute. In particular, Navigant reviewed:

- Employee and employer health insurance premium contributions, and average employer portion of health insurance premiums (inflated to the midpoint of SFY 2019)
- Percent of full-time employees for private employers
- Percent of private employers offering coverage
- Percent of full-time employees enrolled in health insurance at establishments that offer health insurance (“take-up rate”)

Navigant inflated the health insurance premium amounts to the midpoint of SFY 2019 using CMS market basket data.⁷

Bureau of Labor Statistics Minnesota Data

Navigant used BLS data to identify SOCs consistent with direct care workers or supervisors delivering HCBS services, and the average BLS wages for Minneapolis-St Paul, Bloomington, MN-WI (May 2017).

⁷ All data inflated to Midpoint SFY 2019 using Global Insight, Inc. Forecast Assumptions, by Expense Category 1996-2024

Other State HCBS Rate Assumptions

Navigant performed targeted reviews of other state HCBS rate assumptions, including those developed for DWRS. Navigant used states that had the level of detail publicly available to identify and understand the detail beyond their respective rate methodologies. In many cases, states label and describe similar components differently.

Bureau of Labor Statistics Consumer Price Index: Food

Navigant reviewed the BLS CPI (all food) index levels to compare the proposed inflation factor for the adult day services meal component.⁸

Minnesota Nursing Facility Data

As portions of the HCBS rate methodology in Statute rely on nursing facility data (specifically, the payroll taxes and benefits factor, the general and administrative factor, and the annual increase for HDM), Navigant reviewed the most recently available nursing facility data as compiled and analyzed by DHS (Federal Fiscal Year 2016).

HCBS Rate Components and Rates Effective January 1, 2019

DHS calculated HCBS rate components and rates in accordance with Statute. Navigant used the results of these calculations to determine the appropriateness of the values of the rate components described in Statute.

1.3.4 Minnesota Provider Surveys

Navigant conducted two provider surveys to assess the costs incurred by providers for the provision of waiver services in their most recently completed fiscal year (provider fiscal year end June 30, 2017 or December 2017). Surveys varied by provider type to reflect differences in reporting capabilities, as described in Table 1.1 on the following page. DHS strongly encouraged but did not require survey completion.

Providers that do not designate wages, do not have a business tax identification number, or that use the provider's social security number as a business tax identification number were not required to complete the survey. DHS did accept surveys from providers that performed the services under evaluation, even if they did not receive Medicaid payments for those services.

⁸ CPI-All Urban Consumers. Food in U.S. city average, all urban consumers, seasonally. Base period 1982-1984. Data period 2008 to 2018. Available online: https://data.bls.gov/timeseries/CUSR0000SAF1?output_view=pct_3mths

Table 1.1: Overview of Provider Cost and Wage Surveys

| Survey Type | Provider Type | Key Data Collected |
|---------------------------------|--|---|
| Full Cost and Wage Survey | Provider agencies delivering services described in Statute | <ul style="list-style-type: none"> Provider costs (including administration, benefits, wages and salaries, facility, transportation and supplies) Average, high and low wage rates by staff type Direct service and supervisor employee types by service Health insurance and related costs Staffing ratios for adult day services, including groups specific to Alzheimer’s and dementia Number of participants scheduled versus attending adult day service groups (participant absence rate) |
| Home-Delivered Meal Only Survey | Provider agencies who <i>only</i> provide home-delivered meals | <ul style="list-style-type: none"> Provider costs Total number of meals Value of donated services |

Survey Development and Administration

Navigant worked with DHS and the Stakeholder Group to streamline the surveys and strengthen the survey response. This included:

- Creating a separate HDM *only* survey
- Identifying a sample of providers to receive additional communication and training to increase response rate. Navigant used a stratified two-stage random sample as a primary sampling methodology. Each unique provider, with paid Medicaid claims for the services under evaluation, was stratified by geography (urban/rural) and by provider size (small, medium, large). We randomly selected thirty providers from each stratum to include in the sample. DHS was able to review the list to identify any “critical access” providers.⁹
- Removing data elements that are not required for rate component calculation
- Conducting a pilot survey and incorporating provider feedback
- Reviewing draft and final provider surveys with the Stakeholder Group and incorporating feedback prior to release to all providers
- Inviting all providers to complete the survey

⁹ Critical access providers include: those that provide a majority of the services in a geographic region, across the state or a unique provider meeting a specific need where the loss of the specific provider may jeopardize the health and welfare of the recipients (e.g., a special access provider serving a specific cultural group).

DHS notified relevant waiver providers via email prior to survey release regarding the purpose of the rate study, survey release and due dates, and the survey training schedule. Upon survey release on April 30, 2018, DHS emailed all providers the relevant survey and corresponding instructions along with reminders of the survey training schedule. Navigant also created a website that contained information about the survey, survey materials for downloading if needed (Microsoft Excel and .pdf versions), the training schedule and training materials, and frequently asked questions (FAQs). DHS allowed providers six weeks to complete the survey and provided an extension option if additional time was needed.

Survey Support:

- Two WebEx trainings for each survey (4 in total) – two of these trainings were for sample participants only (one for each survey type)
- Training materials and recordings posted on survey website
- Survey-specific email and phone line for providers to ask questions
- Frequently asked questions (FAQ) document listing questions asked by providers and posted to survey website

DHS and key members of the Stakeholder Group conducted outreach to providers. Additionally, DHS conducted further targeted outreach to those providers randomly selected to be in the sample. The intent of the continued communication was to encourage participation and to impress upon providers the importance of survey participation.

After receiving the submitted surveys, Navigant contacted providers directly by phone or email to clarify any possible errors or incomplete responses. Survey data were not audited.

Removal of Room and Board

States must confirm on all HCBS waiver applications to CMS that they have not included room and board costs in HCBS rates. Through the provider survey process, Navigant asked providers to allocate any room and board costs in a designated area on the survey form to separate room and board costs from their total reported waiver costs.

Survey Response Rate

In total, Navigant received 229 surveys representing agencies of various sizes and geographies. Of these 229 providers, 43 were removed due to unusable information or because the provider did not deliver services being evaluated, leaving 186 usable surveys (177 full surveys and 9 HDM *only* surveys). The 186 usable surveys represented 10.5 percent of the 1,767 providers of EW and related program services identified via DHS claims data. When narrowed down to the 255 providers who were randomly selected to participate in the sample and received additional communication, the survey response rate was 27 percent. Tables 1.2 through 1.4 on the following pages provide the provider response rate for the random sample and non-sample providers.

The number of surveys used for the evaluation of each of the rate components varies as Navigant performed a separate analysis of each worksheet submitted to determine if data from that worksheet could be included in the analysis. For example, a provider may have reported wages by staff level accurately on one worksheet but not allocated facility costs accurately in another worksheet. In such a case, Navigant would have included the provider’s data for the wage analysis but not for the analysis of facility costs.

Table 1.2: Provider Response Rates by Survey Type

| | Number of providers | Surveys Received (HDM and All Services) | Response Rate |
|--|---------------------|---|---------------|
| Random sample | 255 | 69 | 27% |
| Other providers with Medicaid claim payments for services under review | 1,512 | 117 | 8% |
| Total | 1,767 | 186 | 11% |

Table 1.3: Provider Response Rates for the All Services Survey

| | | Large Providers | Medium Providers | Small Providers | Total |
|-------|--------------------------|-----------------|------------------|-----------------|-------|
| Rural | Providers Outside Sample | 16 | 19 | 20 | 55 |
| | Providers In Sample | 7 | 16 | 10 | 33 |
| | Total Provider Surveys | 23 | 35 | 30 | 88 |
| Urban | Providers Outside Sample | 20 | 19 | 19 | 58 |
| | Providers In Sample | 13 | 10 | 8 | 31 |
| | Total Provider Surveys | 33 | 29 | 27 | 89 |
| Total | Providers Outside Sample | 36 | 38 | 39 | 113 |
| | Providers In Sample | 20 | 26 | 18 | 64 |
| | Total Provider Surveys | 56 | 64 | 57 | 177 |

Table 1.4: Provider Response Rates for the Home-Delivered Meal Only Survey

| | | Large Providers | Medium Providers | Small Providers | Total |
|-------|--------------------------|-----------------|------------------|-----------------|-------|
| Rural | Providers Outside Sample | 3 | 1 | 0 | 4 |
| | Providers In Sample | 1 | 0 | 2 | 3 |
| | Total Provider Surveys | 4 | 1 | 2 | 7 |
| Urban | Providers Outside Sample | 0 | 0 | 0 | 0 |
| | Providers In Sample | 2 | 0 | 0 | 2 |
| | Total Provider Surveys | 2 | 0 | 0 | 2 |
| Total | Providers Outside Sample | 3 | 1 | 0 | 4 |
| | Providers In Sample | 3 | 0 | 2 | 5 |
| | Total Provider Surveys | 6 | 1 | 2 | 9 |

Section II Wage Analysis and Recommendations

Hourly wages for program employees – both direct care workers and supervisors – are the foundation of the waiver payment rates according to the methods in Statute. This section describes Navigant’s evaluation of the direct care worker wages and supervisor wages used in the rate methodologies in Statute, and the related recommendations.

2.1 Direct Care Worker Wages

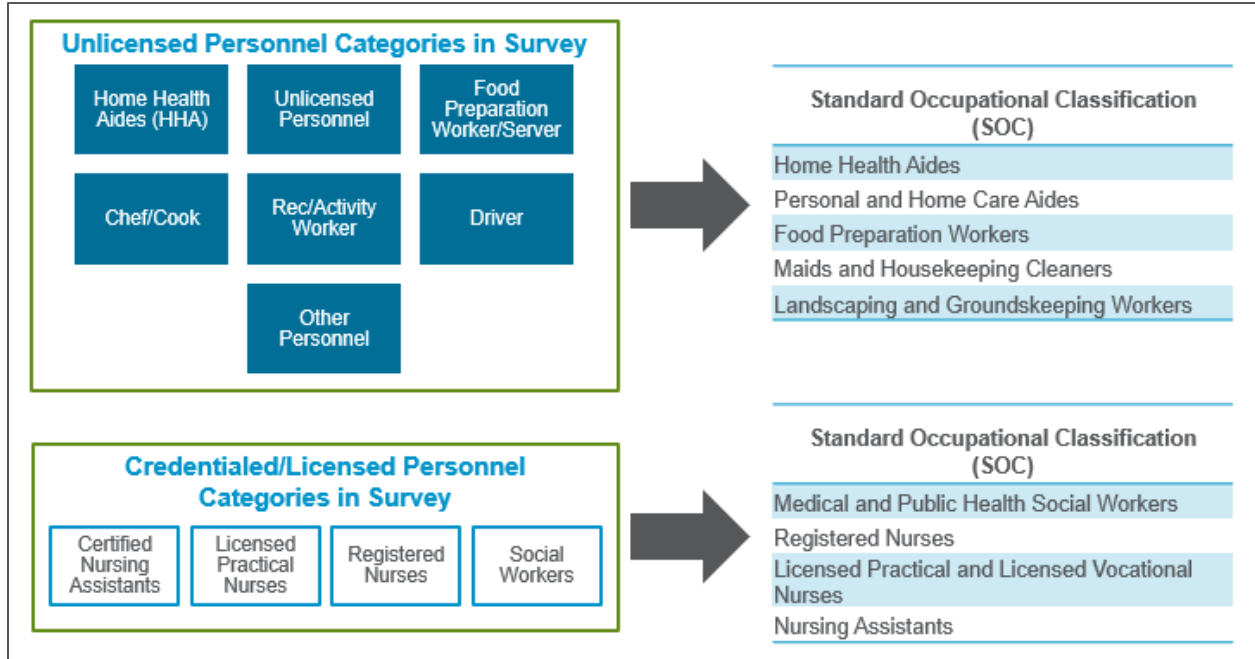
The Statute governing the new methodologies describes – by service – the use of Bureau of Labor Statistics (BLS) standard occupational classification(s) (SOC) and related average hourly wages for the Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area. Appendix A provides a listing of BLS SOCs by service as described in Statute, including the percentages to be applied to each SOC.

2.1.1 Evaluation Approach

Navigant followed the below steps when evaluating the wages in Statute:

1. Identified the following for each service:
 - a. The BLS SOCs assigned and the related percentages, as described in Statute
 - b. The wage resulting from SOC assignment, based on the May 2017 BLS data for the Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area
2. Reviewed the service definition and provider requirements for each service and determined the extent to which:
 - a. The SOCs in Statute reflect the staff type required by the service definition
 - b. The SOCs in Statute reflect the activities required in the service definition
 - c. The staff types reported in the provider survey align with the requirements in the service definition
3. Assessed, by service, how the wage levels reported in the provider survey compare to the resulting wage from the rate setting methods in Statute. Navigant used a crosswalk to identify which staff types reported in the provider survey are considered licensed or unlicensed, and how those staff types relate to the nine SOCs named in the Statute (see Exhibit 2.1 below for the crosswalk). For many services, Navigant observed that providers sometimes identified licensed staff types as providing a service when a licensed staff type was not required. This is potentially because:
 - a. Providers may have incorrectly recorded supervisors as providing direct service,
 - b. Licensed personnel are both delivering and supervising the service.
4. Identified a preliminary recommendation for the Stakeholder Group and DHS feedback
5. Reviewed feedback and provided a final recommendation

Exhibit 2.1: Provider Survey – SOCs in Statute Crosswalk



2.1.2 Overview of Recommendations

After reviewing current Minnesota Statute and the provider survey data for each service under evaluation, Navigant made wage recommendations for direct care workers as summarized in Tables 2.1 through 2.2 below.

Table 2.1: Recommendations by Non-Residential Service

| Service | Recommended Change to SOC Code(s) | Recommended Change to SOC Code Percentages | Base Wage Based on SOC Code(s) in Statute | Base Wage Recommendation Based on SOC Code Changes |
|---|-----------------------------------|--|---|---|
| Adult Day | No | Yes | \$15.04 | \$14.33 |
| Chore | Yes | Yes | \$17.05 | \$15.23 |
| Companion | No | Yes | \$12.87 | \$12.55 |
| Homemaker | Yes | Yes | \$13.37 | \$14.40 (Personal Care/Home Management) \$13.41 (Homemaker – Cleaning) |
| Individual Community Living Supports (ICLS) | Yes | Yes | \$15.04 | \$17.18 |
| Respite (both in-home and out-of-home) | Yes | Yes | \$18.87 | \$18.36 |

Table 2.2: Recommendations by Residential Component Service

| Component Service | Recommended Change to SOC Code(s) | Recommended Change to SOC Code Percentages | Base Wage Based on SOC Code(s) in Statute | Base Wage Recommendation Based on SOC Code Changes |
|---------------------------|-----------------------------------|--|---|--|
| Home Care Aide | No | Yes | \$15.04 | \$14.33 |
| Home Health Aide | Yes | Yes | \$17.73 | \$17.44 |
| Home Management | No | No | \$12.84 | No Change |
| Individual Transportation | No | No | \$12.84 | No Change |
| Medication Setup | No | Yes | \$37.55 | \$30.98 |
| Socialization | No | No | \$12.84 | No Change |

2.1.3 Survey Data Used in Analysis

The provider survey collected wage information for personnel providing the relevant services under review. Of the 177 surveys collected, 21 cost surveys were identified and removed from the wage analysis due to incomplete staff type data. Ultimately, Navigant used the 156 remaining cost surveys in the wage analysis. Within the 156 surveys, each service under review had a different number of survey responses. The below table provides a breakdown of the number of surveys used for evaluation by service.

Table 2.3: Number of Surveys Analyzed by Service Type

| Service Type | Number of Surveys Analyzed |
|---|----------------------------|
| Adult Day | 32 |
| Chore | 16 |
| Companion | 21 |
| Homemaker | 48 |
| Individual Community Living Supports | 9 |
| Respite (both in-home and out-of-home) | 28 |
| Home Care Aide (Residential) | 86 |
| Home Health Aide (Residential) | 69 |
| Home Management (Residential) | 84 |
| Individual Transportation (Residential) | 41 |
| Medication Setups (Residential) | 84 |
| Socialization (Residential) | 78 |

2.1.4 Recommendations by Service Area

In the following subsections, we review the recommendations by service area.

Adult Day Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Wage |
|--------------|--------------------|-----------------|
| 31-1011 | Home Health Aides | 50% |
| 31-1014 | Nursing Assistants | 50% |

Navigant recommends modifying the percent assigned to SOC codes to reflect the large portion of services within Adult Day Services that do not require a certified nurse assistant (CNA) as follows:

- Home health aides – 75 percent
- Nursing assistants – 25 percent

Modifying the SOC percent assigned does decrease the rate below some of the average wages by staff type as reported by providers on the survey. The table below provides context for this recommendation.

Table 2.4: Context for Adult Day Services Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOC codes in Statute to service definition | The staff type required is somewhat consistent as the service definition mentions fulfilling health needs but does not specify that a nursing assistant is required. Navigant recommends adjusting the percent assigned to each SOC within the rate to better reflect the range of covered services. |
| Staff types reported in provider survey compared to service definition | There are a high number of unlicensed providers compared to CNAs in the provider surveys. Some providers reported the use of social workers and registered nurses in conjunction with unlicensed staff, however, licensed professionals are not required by the service definition, license or rules. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average wages reported in the provider survey for unlicensed personnel and CNAs are lower than the resulting wage from the rate setting methods in Statute. |

Chore Services

The BLS SOC and percentage of the wage in Statute is:

| BLS SOC Code | Description | Percent of Wage |
|--------------|--|-----------------|
| 37-3011 | Landscaping and Groundskeeping Workers | 100% |

Navigant recommends:

- Modifying the SOC codes used to reflect the role of maids and housekeeping cleaners in Chore services.
- Modifying the percent assigned to each SOC code to reflect the range of services as follows:
 - Landscaping and groundskeeping workers – 50 percent
 - Maids and housekeeping cleaners – 50 percent

The table below provides context for this recommendation.

Table 2.5: Context for Chore Wage Recommendation

| Area Under Evaluation | Observation(s) |
|--|--|
| Consistency of SOCs in Statute to service definition | The Landscaping and Groundskeeping SOC code in Statute does not fully reflect the staff types and activities required in the service definition. Navigant recommends adding an additional SOC within the rate to better reflect the range of covered services. |
| Staff types reported in provider survey compared to service definition | Overall, staff types reported by providers in the survey appear to align with the service definition. There were a few licensed practitioners reported in the survey data, which is inconsistent with the skills required to perform chore services. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average reported wage for unlicensed personnel in the provider survey is a substantially lower wage than the resulting wage from the rate setting methods in Statute. |

Companion Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Wage |
|--------------|---------------------------------|-----------------|
| 39-9021 | Personal and Home Care Aides | 50% |
| 37-2012 | Maids and Housekeeping Cleaners | 50% |

Navigant recommends modifying the percent assigned to SOC codes as follows to reflect the wide range of non-housekeeping duties performed through this service:

- Personal and home care aides – 80 percent
- Maids and housekeeping cleaners – 20 percent

The table below provides context for this recommendation.

Table 2.6: Context for Companion Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition. Navigant recommends adjusting the percent assigned to each SOC within the rate to better reflect the range of covered services. |
| Staff types reported in provider survey compared to service definition | Providers reported relying primarily on unlicensed staff, consistent with service definition requirements. A handful of providers also reported the use of social workers and registered nurses in conjunction with unlicensed staff. Some providers reported the use of volunteers when delivering companion services. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages in the provider survey for unlicensed personnel are slightly lower than the resulting wage from the rate setting methods in Statute. |

Homemaker Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Wage |
|--------------|---------------------------------|-----------------|
| 31-1014 | Nursing Assistants | 20% |
| 39-9021 | Personal and Home Care Aides | 60% |
| 37-2012 | Maids and Housekeeping Cleaners | 20% |

Navigant recommends:

- Identifying two distinct wages for:
 - Homemaker – Cleaning
 - Homemaker – Personal Care / Home Management
- Using a “Homemaker – Cleaning” wage that reflects the role of unlicensed providers by assigning 100 percent of the SOC for maids and housekeeping cleaners (37-2012)
- Using a “Homemaker – Personal Care / Home Management” wage that reflects the role of licensed providers as follows:
 - Nursing assistants – 50 percent
 - Personal and home care aides – 50 percent

The table below provides context for this recommendation.

Table 2.7: Context for Homemaker Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition. Navigant recommends separating the SOC codes to better reflect the variance between the “homemaker cleaning service” and the “homemaker personal care / home management” service. |
| Staff types reported in provider survey compared to service definition | Providers of only “homemaker – cleaning” reported only unlicensed staff, consistent with service definition requirements. Providers of “homemaker personal care / home management” services reported unlicensed staff as well as certain licensed or certified staff. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages in the provider survey are slightly lower than the resulting wage from the rate setting methods in Statute for both separated homemaker wages. |

Individual Community Living Supports (ICLS) Services

The Statute listed two different assignments of BLS SOC codes and percentages, listed below. DHS used “Option 1” below to develop rates for implementation on January 1, 2019 as the language describing this option was specific to the rate methodology calculation.

Statute Option 1 (Used For Rate Setting In Statute).

| BLS SOC Code | Description | Percent of Wage |
|--------------|--------------------|-----------------|
| 31-1011 | Home Health Aides | 50% |
| 31-1014 | Nursing Assistants | 50% |

Statute Option 2 (Referenced In Statute, But Not For Rate Setting Purposes).

| BLS SOC Code | Description | Percent of Wage |
|--------------|---|-----------------|
| 31-1011 | Licensed Practical and Licensed Vocational Nurses | 20% |
| 31-1014 | Nursing Assistants | 80% |

Navigant recommends modifying the SOC codes as follows to reflect the commonalities between the ICLS and the Independent Living Skills service offered through the Minnesota disability waivers:

- Nursing assistants – 40 percent
- Social and Human Services Aide – 60 percent

The table below provides context for this recommendation.

Table 2.8: Context for ICLS Wage Recommendation

| Area Under Evaluation | Observation |
|--|--|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute Option 1 reflect the staff types and activities required in the service definition. |
| Staff types reported in provider survey compared to service definition | Providers did not report any nursing assistants in the survey data, but the number of surveys was limited, and this is a relatively new service. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages from the provider survey data are lower than the resulting wage from the rate setting methods in Statute. |

Respite Services (both in-home and out-of-home)

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Wage |
|--------------|---|-----------------|
| 31-1014 | Nursing Assistants | 70% |
| 29-1141 | Registered Nurses | 5% |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 20% |

Navigant recommends modifying the SOC codes used to reflect the role of home health aides in Respite services (both in-home and out-of-home) and modifying the percent assigned to SOC to reflect the wide range of non- CNA/LPN duties as follows:

- Home health aides – 75 percent
- Registered nurses – 15 percent
- Licensed practical and licensed vocational nurses – 10 percent

The table below provides context for this recommendation.

Table 2.9: Context for Respite Wage Recommendation

| Area Under Evaluation | Observation |
|--|--|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute do not reflect the staff types and activities required in the service definition. Rather, a home health aide seems more appropriate than a nursing assistant. |
| Staff types reported in provider survey compared to service definition | The provider survey results appear to support that the SOC codes need to be adjusted, as most providers reported unlicensed providers delivering respite services. Also, the proportion of RNs and LPNs recommended above reflects the results of the provider survey. Some providers reported the use of volunteers when delivering respite services. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages from the provider survey data are lower than the resulting wage from the rate setting methods in Statute. |

Resident Service Component: Home Care Aide Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Rate |
|--------------|--------------------|-----------------|
| 31-1011 | Home Health Aides | 50% |
| 31-1014 | Nursing Assistants | 50% |

Navigant recommends modifying the percent assigned to SOC to reflect the relative number of providers reporting that unlicensed personnel deliver the service as compared to CNAs as follows:

- Home health aides – 75 percent
- Nursing assistants – 25 percent

The table below provides context for this recommendation.

Table 2.10: Context for Home Care Aide Wage Recommendation

| Area Under Evaluation | Observation |
|---|---|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition. Navigant recommends adjusting the percent assigned to each SOC within the rate to better reflect the range of covered services. |
| Staff types reported in provider survey compared to service definition | The staff types reported on the provider survey appear to align with the service definition, but providers reported many more unlicensed providers as compared to CNAs. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute: | The average and median reported wages from the provider survey data are lower than the resulting wage from the rate setting methods in Statute. |

Residential Service Component: Home Health Aide Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Rate |
|--------------|---|-----------------|
| 31-1014 | Nursing Assistants | 80% |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 20% |

Navigant recommends:

- Modifying the percent assigned to SOC to reflect the wide range of non-CNA duties required for Home Health Aide services
- Modifying the SOC codes used to reflect the use of home health aides, as follows:
 - Licensed practical and vocational nurses – 33 percent
 - Nursing assistants – 33 percent
 - Home health aides – 33 percent

The table below provides context for this recommendation:

Table 2.11: Context for Home Health Aide Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition. |
| Staff types reported in provider survey compared to service definition | The survey results reflect substantial use of unlicensed personnel but also a notable use of CNAs, LPNs, and RNs. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages from the provider survey data are lower than the resulting wage from the rate setting methods in Statute. |

Residential Service Component: Home Management Support Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Wage |
|--------------|---------------------------------|-----------------|
| 35-2021 | Food Preparation Workers | 33.33% |
| 39-9021 | Personal and Home Care Aides | 33.33% |
| 37-2012 | Maids and Housekeeping Cleaners | 33.33% |

Navigant does not recommend any changes for Home Management Support services. The table below provides context for this recommendation.

Table 2.12: Context for Home Management Wage Recommendation

| Area Under Evaluation | Observation |
|--|--|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition, as well as providers' use of "universal workers" (workers who perform multiple job tasks or functions). |
| Staff types reported in provider survey compared to service definition | Providers reported mostly unlicensed providers in the survey data, but some providers did report providers such as CNAs or LPNs. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average reported wage from the provider survey data is slightly higher than the resulting wage from the rate setting methods in Statute while the median wage from the provider survey data is slightly lower. |

Residential Service Component: Medication Setups by Licensed Nurse Services

The BLS SOC codes and percentages of the wage in Statute are:

| BLS SOC Code | Description | Percent of Rate |
|--------------|---|-----------------|
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 10% |
| 29-1141 | Registered Nurses | 90% |

Navigant recommends modifying the percent assigned to SOC to reflect the role of LPNs in Medication Setups, as follows:

- Licensed practical and vocational nurses – 25 percent
- Registered nurses – 75 percent

The table below provides context for this recommendation:

Table 2.13: Context for Medication Setups Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOC codes in Statute to service definition | The SOC codes in Statute reflect the staff type required in the service definition. Navigant recommends adjusting the percent assigned to each SOC within the rate to better reflect the range of covered services. |
| Staff types reported in provider survey compared to service definition | Many providers reported unlicensed staff types delivering this service, presumably due to unlicensed staff performing a support function for licensed nurses. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The average and median reported wages from the provider survey data are lower than the resulting wage from the rate setting methods in Statute. |

Residential Service Components: Socialization Services and Individualized Transportation Services

For Socialization and Individualized Transportation Services the BLS SOCs and percentages of the wage in Statute are the same as those for [Residential Service Component: Home Management Support Services in Statute](#).

Socialization Services

Navigant does not recommend any changes for Socialization services. The table below provides context for this recommendation:

Table 2.14: Context for Socialization Wage Recommendation

| Area Under Evaluation | Observation |
|--|---|
| Consistency of SOCs in Statute to service definition | The SOC codes in Statute reflect the staff types and activities required in the service definition, as well as providers' use of "universal workers" (workers who perform multiple job tasks or functions). |
| Staff types reported in provider survey compared to service definition | The staff types reported in the cost survey appear to align with the Statute and service definition in that most providers are reporting the use of unlicensed personnel. |
| Wage levels reported in provider survey compared to wages from rate setting methods in Statute | The reported wage from the provider survey data shows the average and median wage slightly higher than the resulting wage from the rate setting methods in Statute. |

Individualized Transportation Services

Navigant does not recommend any changes for Transportation services. Further analysis of Transportation services is being completed through a separate legislatively-mandated study, also performed by Navigant.

2.2 Supervisor Type

The supervisor component of the rate takes into account the need for supervision for the covered services. The type of supervisor may vary by the service involved, for example, some services may require more intensive clinical oversight (home care aide) while others may not (chore or companion).

2.2.1 Supervisor Type in Statute

The Statute includes two types of supervisors which vary by service: social worker and registered nurse. Table 2.13 below describes which supervisor type was assigned to each service.

Table 2.15: Supervisor Type by Service in Statute

| Service / Component Service | Social Worker | Registered Nurse |
|---|---------------|------------------|
| Adult Day and Adult Day Bath | | X |
| Chore | X | |
| Companion | X | |
| Homemaker | | X |
| Individual Community Living Supports | X | |
| Respite (both in-home and out-of-home) | | X |
| Home Care Aide (Residential) | | X |
| Home Health Aide (Residential) | | X |
| Home Management/Support (Residential) | | X |
| Individual Transportation (Residential) | | X |
| Socialization (Residential) | | X |

2.2.2 Provider Survey Results Regarding Supervisor Type

The provider survey results provided data points regarding the supervisors used for each service under evaluation. Providers were asked to indicate the supervisor type(s) for each service under evaluation along with corresponding wage information. The supervisor types that providers could select include:

- Registered Nurses
- Social Workers
- Executive/Program Directors
- Unlicensed Supervisors
- Case Managers
- Care Coordinators
- Volunteer Coordinators
- Other Supervisors

Navigant reviewed the number and type of supervisors reported in aggregate across surveys for each service. Navigant excluded any responses where organizations did not report a wage for a supervisor type to ensure accuracy in the survey. Table 2.14 below shows, by service, the supervisor listed in Statute and the survey results.

Table 2.16: Provider Survey Supervisors Listed by Service Type

| Service | Supervisor in Statute | Cost Survey Results (# of Surveys) |
|--|-----------------------|---|
| Adult Day Services | RN | Executive/Program Director (10), RN (10), SW (2) |
| Chore | SW | RN (3), Executive/Program Director (2), Volunteer Coord (2) |
| Companion Services | SW | Executive/Program Director (5), RN (4), SW (4) |
| Homemaker | RN | RN (16), Executive/Program Director (10), Unlicensed (10) |
| ICLS | SW | RN (4), three supervisors reported on one survey each |
| Respite (both in-home and out-of-home) | RN | RN (12), Executive/Program Director (10), SW (5) |
| Home Care Aide | RN | RN (39), Executive/Program Director (21), Unlicensed (10) |
| Home Health Aide | RN | RN (33), Executive/Program Director (18), Unlicensed (9) |
| Home Management | RN | Executive/Program Director (34), RN (30), Unlicensed (16) |
| Individual Transportation | RN | Executive/Program Director (16), RN (9), Unlicensed (8) |
| Socialization | RN | Executive/Program Director (31), RN (16), Unlicensed (10) |

2.2.3 Provider Focus Group Feedback Regarding Supervisor Type

In May 2018, Navigant conducted a provider focus group that included a discussion of supervisor types for the services being evaluated. The provider focus group helped provide additional context regarding supervisor types in addition to the information captured in the provider cost survey. Table 2.15 below provides observations from the provider focus group regarding supervisor types.

Table 2.17: Provider Focus Group Supervisor Type Observations

| Service | Supervisor Types Described During Provider Focus Group |
|--|---|
| Adult day services | <ul style="list-style-type: none"> • LSW and LCSW • RN |
| Chore | <ul style="list-style-type: none"> • Social worker • Someone with a 2-year degree with experience working with seniors |
| Home care | <ul style="list-style-type: none"> • RN supervises LPNs, LPN supervises aides (RN will supervise in Medicare-certified home health agencies) • Unlicensed but someone with LTSS experience |
| Homemaker/ companion / in-home respite | <ul style="list-style-type: none"> • Social worker OR designated coordinator, not necessarily a SW. • Coordinator does scheduling, coordinator and director share the oversight role • RNs and LSWs • End of Life – RN supervises aides |

2.2.4 Recommendation – Supervisor Type

Navigant recommends the following adjustment to the supervisor type assigned to each service:

- *For chore, companion and homemaker:* Change the supervisor to First Line Supervisors of Personal Service Workers (SOC 39-1021). The average hourly wage for this SOC is \$19.40 according to the May 2017 data for the Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area. The inclusion of a supervisor for these services is intended to cover the costs of scheduling, coordinating and other supervision, which is outside of the administrative cost factor, which will be discussed in a later section.
- *Change ICLS supervisor to an RN (from SW).* The majority of ICLS surveys received listed RN’s as supervisors and the service definition standards support the supervision of an RN, instead of a SW.

Section III Non-Wage Components

The rate methodologies in Statute include several non-wage cost factors, specifically, payroll taxes and benefits, general and administrative (G&A), program plan support, supervision, staffing ratios, and the cost of meals for adult day services. We describe our evaluation of each of these factors and components in this section along with a discussion of cost components that are not addressed in Statute. These additional cost components include: facilities and equipment related to adult day service provision, transportation costs, food, supplies and participant absences.

3.1 Payroll Taxes and Benefits Factor

The payroll taxes and benefits factor may be used to reflect the cost of program employee benefits, specifically:

- Required benefits such as those required by the Federal Insurance Contributions Act (FICA), the Federal Unemployment Tax Act (FUTA) and the State Unemployment Tax Act (SUTA) along with insurance costs for state workers compensation
- Health and dental insurance
- Retirement benefits
- Long and short-term disability benefits

Paid time off (vacation, holiday and sick leave) and training costs may be included in this factor or may be represented in a separate standalone factor.

3.1.1 Payroll Taxes and Benefits Factor In Statute

The benefits factor in Statute is described as follows:

“The payroll taxes and benefits factor is the sum of net payroll taxes and benefits divided by the sum of all salaries for all nursing facilities on the most recent and available cost report.”

DHS calculated a 22.07 percent factor based on nursing facility data and included paid time off (vacation, holidays and sick leave) and training costs as part of this calculation. Navigant performed several other analyses to evaluate this approach.

3.1.2 Provider-Reported Payroll Taxes and Benefits

The provider survey-derived factors for benefits, PTO and training are – in the aggregate – similar to the factor calculated by DHS using nursing facility data. Navigant performed this analysis as follows:

- Calculated a benefit median factor from the provider survey data. For each provider, Navigant divided total employee taxes, insurance, and benefits (excluding other employee insurance and benefits) by total employee salaries and wages.
- Removed any surveys that reported a benefits factor under 7.65 percent of salaries and wages and over 40 percent of salaries and wages assuming these values are likely a result of inaccurately reported costs. The 7.65 percent of salaries and wages represents the employer portion of the federally mandated taxes, which should be paid at a

minimum. Navigant based the 40 percent of salaries and wages on experience with payroll and benefits factors in other states, and the distribution of the calculated factors in the surveys.

Ultimately, Navigant used 128 surveys and calculated a median benefit factor of 16.44 percent. Navigant then used provider survey data to identify median and average paid time off and training factors as illustrated in Table 3.1 below.

Table 3.1: Paid Time Off and Training Factor as Calculated Using Provider Survey Data

| | PTO Hours | Training Hours | PTO Factor | Training Factor |
|---------|-----------|----------------|------------|-----------------|
| Average | 111.9 | 16.1 | 1.054 | 1.008 |
| Median | 96 | 12.0 | 1.046 | 1.006 |

The provider survey-derived factors for benefits, PTO and training are – in the aggregate – similar to that calculated by DHS using nursing facility data (21.6 versus 22.08):

| | |
|---------------------------|-------------|
| Median benefits factor: | 16.4 |
| + Median PTO factor: | 4.6 |
| + Median training factor: | 0.6 |
| Total | 21.6 |

3.1.3 Analysis of Health Insurance and Part-Time Workers

Health insurance is a primary driver of a payroll tax and benefits factors and reflects the proportion of full-time to part-time workers, employer offer, and employee take-up. To better understand health insurance at the organizations under review, Navigant compared health insurance premiums, health insurance offer by employers, and take-up rates reported in the HCBS provider survey data to MEPS-IC data for private sector employers in Minnesota. We also reviewed the percentage of full-time versus part-time workers. Key observations included:

- Sixty-one percent of providers responding to the HCBS provider survey reported offering health insurance as compared to 49 percent in the MEPS MN statewide average.
- Of the providers that reported offering health insurance in the HCBS provider survey, the median take-up percentage of health insurance by direct care workers was 55 percent while the MEPS MN average in 2017 was 70 percent.
- The median full-time employee percentage was 45 percent in the HCBS provider survey as compared to the 2017 MN MEPS average of 75 percent.
- Providers reported higher average and median premium and deductible amounts on the HCBS provider survey as compared to the 2017 MEPS MN data. The providers in the HCBS survey data reported a lower average and median percent of premium paid by employee contributions than in the MN 2017 MEPS data.

Navigant concluded that employees of HCBS providers for the services analyzed in the HCBS provider survey are more likely to be part-time as compared to employees of all private sector

employers included in the MEPS data. Part-time status is a major driver of how many employees are eligible for health insurance coverage or have paid time off benefits. Navigant does not recommend calculating a payroll tax and benefits factor based on MEPS data as it does not adequately reflect the prevalence of part-time workers for the HCBS services under review.

3.1.4 Recommendation – Payroll Tax and Benefits Factor

Navigant recommends DHS continue using the current payroll tax and benefits factor as described in Statute and calculated by DHS. This percentage is consistent with that calculated using provider survey data, assumes that HCBS and nursing homes use a similar labor force, and recognizes the need for benefits to attract and retain employees.

3.2 Program Plan Support

The program plan support factor is intended to cover the cost of direct service staff needed to provide support for the home-and-community-based service when not engaged in direct contact with clients. Examples of program plan support from Minnesota’s disability waiver programs include: documentation, direct staff preparation and service planning, collateral contact related to direct service, and travel time when the client is not present. The amount of unbillable time typically varies by service. For example, residential care often requires more non-direct care time than respite care due to documentation and regulatory requirements.

3.2.1 Program Plan Support Factor In Statute

The legislation identified a program plan support factor of 12.8 percent, which is applied to all services. This factor accounts for costs associated with program activities that are not billable but are essential to delivering the service. The 12.8 percent factor value is equal to approximately five hours of a 40-hour work week. This factor value was taken from the 2017 Minnesota Disability Waivers Rate Report, which stated¹⁰:

*“The provider survey result for Residential services indicated **12.8** percent of direct care staff’s total work time is spent not directly interacting with recipients, but performing indirect tasks such as documentation, preparation, service planning, and service coordination.”*

Ultimately, the MN DWRS did not implement a program plan support factor in the residential services rate calculation, as it is assumed that any indirect time is administrative and captured in the standard G&A factor. The MN DWRS uses alternative percentages for non-residential services. The current MN DWRS program plan support factors are described in Table 3.2.

10 Minnesota Department of Human Services. Disability Waivers Rate System Report. January 15, 2017.

Table 3.2: MN DWRS Program Plan Support Factors by Service

| Service | Program Plan Support Factor |
|---|-----------------------------|
| Adult Day Care Day Training and Habilitation Service | 5.6% |
| Individualized Home Support In-Home Family Support | 15.5% |
| Personal Support/Adult Companion | 7.0% |

3.2.2 Program Plan Support Focus Group Feedback

In May 2018, Navigant conducted a provider focus group to better understand and explore differences in non-billable time for the services under evaluation. Key observations by the group included:

- There is substantial variance in program plan support across services and sometimes between providers for the same service. Program plan support activities include:
 - Direct staff preparation and service planning
 - Collateral contact related to direct service
 - Travel time to participants
 - Documentation
- Program plan support time for in-home services including chore, homemaker, companion, and in-home respite care is very similar. There is a substantial amount of travel time involved with these services.
- Residential care and out-of-home respite care have similar levels of program plan support.
- For adult day, approximately 10-15 percent of a work week is spent on program plan support activities.
- For adult foster care, some focus group participants indicated more indirect service time than in the adult day setting.

3.2.3 Recommendation – Program Plan Support

After receiving feedback from the provider discussion group and reviewing MN DWRS factors, Navigant recommends varying the program plan support factor by service. While the use of one standard factor reduces complexity in the rate calculation and can represent program plan support in aggregate across the system, certain challenges exist. Specifically, providers that focus on only one or two services may receive a rate that includes a program plan support factor that is too high or too low for the services provided.

Navigant recommends the program plan support factor values in Table 3.3 based on provider focus group feedback, review of the MN DWRS program plan support factors and input provided by DHS staff. Additionally, Navigant recommends changing the order of operations to apply the program plan support factors to the base wage plus benefits to account for the full cost of employee unbillable time. A program plan support factor should not be applied to the supervisor wages.

Table 3.3: Recommended Program Plan Support Factors by Service

| Service | Program Support Factor | Source |
|---|------------------------|--|
| Adult day services | 10.0% | Discussion group |
| Personal care services (chore, companion, homemaker), respite (both in-home and out-of-home), and individual community living support | 15.5% | MN Disability Waivers' program plan support factor for in-home family support and positive supports services |
| Customized living and adult foster care | 10.0% | Based on adult day service program support factor as the services both occur in congregate settings and reflect similar care plan expectations, documentation requirements and staff meeting time. |

3.3 General and Administrative Factor

The G&A factor is used to reflect the cost of general office and administrative overhead costs, specifically:

- Administration employee salaries and wages and benefits
- Contracted administration services
- Non-payroll administration expenses (training, recruitment, etc.)
- Non-service related transportation

3.3.1 G&A Factor in Statute

The G&A factor is described as follows in Statute:

“The general and administrative factor is the sum of net general and administrative expenses minus administrative salaries divided by total operating expenses for all nursing facilities on the most recent and available cost report...[for the adult day services rate] the general and administrative factor used shall be 20 percent”

DHS calculated an 8.66 percent factor value based on Federal Fiscal Year 2016 nursing home cost reports data. This data is received annually and audited by DHS.

3.3.2 Provider-Reported G&A

Navigant compared the G&A factor developed in Statute to a G&A factor developed based on provider survey data. We recommend calculating the G&A factor as a percent of wages, salaries and benefits, since this factor is applied to the base wage of the rate, as opposed to the G&A factor in Statute which is expressed as a percent of total operating expenses. As such, we used the following steps to identify a factor for comparison.

Step One: Removed the following surveys from the analysis:

- Provider surveys with non-HCBS costs reported to account for providers that may have non-HCBS lines of business which could potentially skew the G&A factor. This was necessary because providers were asked to report G&A in the aggregate across their organization, versus specific to each service.
- Provider surveys with no reported administrative costs, under the assumption that all providers have some administrative costs associated with HCBS

Step Two: Removed costs associated with “Administrator/CEO/Director” if the provider did not allocate salaries and wages between administration and direct care but indicated that the “Executive/Program Director” had direct care supervisory responsibilities

Step Three: Calculated provider-specific G&A factors by dividing individual provider-specific administrative costs by provider-specific total program employee salaries, wages and benefits, specifically:

Total administration employee salaries and wages and benefits¹¹, contracted administration services, non-payroll administration expenses, and non-payroll related transportation

Total direct care, supervisor, and program employee salaries and wages and benefits¹², and contracted program services

Facility and equipment-related costs were not included in this calculation because a review of survey data indicated that providers did not appropriately allocate facility-related costs between administrative and service delivery. Section 3.6 of this report describes a proposed facility and equipment cost factor for adult day services.

Step Four: Removed surveys from the analysis with G&A factors over 40 percent, under the assumption the provider incorrectly reported its administrative costs

Step Five: Identified the median provider G&A factor

¹¹ Benefit costs calculated by applying the median benefits factor from all providers to the admin employee salaries and wages

¹² *Ibid*

The following table shows the G&A factors calculated based on the survey data, by location and size of provider.

Table 3.4: Calculated G&A Factors across Sampled Survey Providers

| | | Large | Medium | Small | Total |
|-------|-----------------------|-----------|-----------|-----------|--------------|
| Rural | G&A Factor | 18.5% | 17.7% | 12.0% | 12.8% |
| | # of Surveys | 6 | 8 | 15 | 29 |
| Urban | G&A Factor | 17.7% | 15.1% | 13.5% | 14.8% |
| | # of Surveys | 7 | 9 | 12 | 28 |
| Total | G&A Factor | 17.7% | 16.2% | 12.5% | 14.4% |
| | # of Surveys | 13 | 17 | 27 | 57 |

3.3.3 G&A Factor In Other States and in the Minnesota Disability Waiver Rate System

Navigant compared the results of the provider surveys to values used by DWRS and other states. States often used provider survey data to develop G&A factors, but in some cases capped the administrative factor at a predetermined percent of the total wages. For comparison purposes, the table below shows the variance in G&A factors across states, expressed as a percent of calculated rates.

Table 3.5: Selected G&A Factors Across Other State Payers

| State | Percent of Total Rate |
|--|---|
| MN Statute for services under evaluation – as originally calculated by DHS | 4 – 22 percent |
| Minnesota DWRS (services excluding family foster care) | <ul style="list-style-type: none"> • 13.25 percent Standard G&A factor, which represents general office and administrative overhead business costs. This 13.25 percent is re-expressed from 23 percent and calculated as a percent of direct care worker wages, salaries and benefits, as reported in provider cost data. • 1.8 percent Program Related Expenses factor (or Program G&A) for day services, which represents overhead costs such as technology software and hardware, telecommunications, and billing infrastructure. This 1.8 percent is re-expressed from 5.4 percent and calculated as a percent of direct care worker wages, salaries and benefits, as reported in provider cost data. |
| Colorado | 16 – 22 percent |
| Arizona | 10 percent (for day habilitation and group home and attendant care, statewide) |
| Wyoming | 16 – 18 percent |
| Maryland | 11 percent |

3.3.4 Recommendation – G&A Factor

Navigant recommends using a G&A factor of 14.4 percent, calculated using provider survey data and expressed as a percent of base wages plus the payroll tax and benefit factor. This approach to the G&A factor is more appropriate than what is in Statute because the factor is applied to the base wage portion of the rate, rather than expressed as a percent of total operating expenses. In addition, a provider survey data-based factor reflects the administrative structure of HCBS providers, which may vary from nursing facilities.

3.4 Supervisor Span of Control

The supervisor span of control assumption adjusts the cost of the supervisor to reflect the number of employees supervised. For example, if a supervisor oversees 10 employees (1:10), then the supervisor's hourly wage would be divided by 10.

3.4.1 Supervisor Span of Control in Statute

The Statute sets the supervisor component at 15 percent of the adjusted base wage for the supervisor, which is equivalent to a staff ratio of approximately 1:7. The adjusted base wage is the base wage from the assigned BLS SOC codes multiplied by the value of the payroll taxes and benefits, plus the assigned BLS SOC codes multiplied by the G&A factor, and plus the assigned BLS SOC codes multiplied by the program plan support cost factors.

3.4.2 Provider Focus Group Feedback on the Supervisor Span of Control

In May 2018, Navigant conducted a provider focus group that included a discussion of supervisor span of control for the EW and AC programs. Observations from the provider focus group included:

- The number of part-time workers make establishing supervisor span of control ratios problematic. For example, for homemaking and respite care, a supervisor may be responsible for 30-50 individuals, but they are largely part-time employees.
- For residential services ("home care"), the supervisor span of control ranges from 1:6 to 1:12

3.4.3 Recommendation – Supervisor Span of Control

After consideration of the provider focus group discussion, Navigant does not recommend any changes to the supervisor span of control. The provider focus group discussion generally supported the supervisor component of 15 percent of the BLS adjusted base wage.

3.5 Staffing Ratios

A staffing ratio is the number of recipients one service provider employee supports.

3.5.1 Staffing Ratios in Statute

The Statute lists a staffing ratio of 1:1 except for adult day services, which has a 1:4 staffing ratio. For comparison, MN DWRS uses an average staffing ratio of 1:4 for day services.¹³

3.5.2 Adult Day Staffing Ratios

Current Minnesota Administrative Rules 9555.9690 for adult day services provide requirements for staffing ratios, as outlined below, for a 1:5 to 1:8 ratio depending on participant capability:¹⁴

“...when a center serves only participants who are capable of taking appropriate action for self-preservation under emergency conditions, the center shall maintain a minimum staff to participant ratio of one staff member present for every eight participants present”

And,

“...when a center serves only participants who are not capable of taking appropriate action for self-preservation under emergency conditions, the center shall maintain a minimum staff to participant ratio of one staff member present for every five participants present”

3.5.3 Adult Day Service Staffing Ratios in Provider Survey Data

Providers of adult day services were asked to report adult day staffing ratios by type of group on the provider cost and wage survey. Specifically, each survey respondent was asked to list the number of scheduled participants and the number of staff by adult day group and whether those groups were specific to individuals with Alzheimer’s or dementia. Ultimately, 30 surveys reported adult day service information across 46 groups (some respondents had multiple groups). Table 3.6 below shows the adult day staffing ratios reported.

Table 3.6: Adult Day Staffing Ratios from the Provider Survey

| Is this group specific for Individuals with Alzheimer's / Dementia? | Number of Groups | Typical Scheduled Participants | Typical Scheduled Staff | Average Staffing Ratio |
|---|------------------|--------------------------------|-------------------------|------------------------|
| No | 30 | 691 | 130 | 1:5 |
| Yes | 16 | 531 | 84 | 1:6 |
| Grand Total | 46 | 1,222 | 214 | 1:6 |

¹³ Disability Waiver Rate System. January 15, 2017. Available online: <https://www.leg.state.mn.us/docs/2017/mandated/170031.pdf>

¹⁴ Minnesota Administrative Rules. 9555.9690 Staff Ratio and Center Coverage. August 12, 2013. Available online: <https://www.revisor.mn.gov/rules/9555.9690/>

Navigant reviewed the staffing ratios in further detail to understand to what extent staffing ratios might differ between groups for individuals with Alzheimer’s or Dementia and groups for individuals without these diagnoses. This review found that a similar number of providers reported staffing ratios greater than 1:7 and less than 1:4 between these two types of groups. The wide distribution of staffing ratios made any further analysis inconclusive regarding differences in groups.

3.5.4 Recommendation – Staffing Ratios

Navigant concluded that the staffing ratio of 1:4 in Statute is too narrow based on a review of the provider survey data and Minnesota Administrative Rule. We recommend a staffing ratio of 1:5 to align the rate methodology with staffing ratio requirements in the Minnesota Administrative Rules, and to reflect survey data responses.

3.6 Factors Related to Facilities, Equipment, Food, Supplies and Transportation

Home and community-based services rate models often incorporate factors that reflect costs associated with facilities, equipment, food and supplies. These factors will vary by service as not all services require each of these individual costs. Table 3.7 below illustrates which of these costs are included in key service groupings under evaluation

Table 3.7: Additional Costs by Service Grouping

| Service Grouping | Type of Cost |
|---|---|
| Adult day services | Facility/equipment Food, supplies and transportation |
| Chore, companion, homemaker, individual community living support, and respite services (both in-home and out-of-home) | Supplies (non-food) and transportation |
| Customized living and foster care services | Supplies (non-food) |

3.6.1 Factors In Statute

The Minnesota Statute did not specify factors for facilities, equipment, food, supplies and transportation with two exceptions:

- Adult day was assigned a G&A factor of 20 percent, substantially higher than other services. While the Statute did not specify why this higher factor was included, it is possible that it was meant to cover additional costs for adult day service delivery such as facilities and equipment and transportation
- An adult day meal add-on of \$0.63 per 15-minute unit

3.6.2 Approaches Used by Other States to Recognize Similar Costs

States have implemented factors representing these additional costs using different approaches. These factors may be applied to the base wage, or in some cases, as a predetermined add-on dollar amount (for example an adult day meal or facility space add-on). Factors applied to the base wage may be calculated for a specific cost, or for a grouping of costs. Table 3.8 provides examples of the variety of approaches used by states.

Table 3.8: Overview of Approaches Used by Other States Related to Supplies and Facility-Related Costs

| | Supplies | Facility Expense (non-room and board) |
|---|---|--|
| MN DWRS | Included in the standard G&A or Client Programming & Supports factor for residential services | Daily facility payment amount for day treatment services |
| Wyoming | Included in a program support factor that encompasses supplies, program support employees and non-room and board facility costs. Factor ranges from 7.33 (homemaker) to 25.34 (day habilitation). | |
| Arizona - Adult and Child Day Treatment and Training Services | Per member per hour rate | Separate capital expense rates (per member per hour at 125 square feet per member) |
| Maryland | Included in a program support factor which ranges from 12.3 percent for respite to 27.8 percent for day services. Factor includes supervision and “other categories” in addition to supplies. | Separate factor of 24.8 percent |

3.6.3 Additional Factors Based on Provider Survey Data

Navigant developed four factors for consideration that recognize costs associated with facilities and equipment, transportation, supplies and food. These factors would be used in lieu of the per meal add-on for adult day services and higher adult day G&A factor, and would vary by service as follows:

- Facility/equipment factor – adult day services
- Food, supplies and transportation factor – adult day services
- Supplies (non-food) and transportation factor – chore, companion, homemaker, individual community living support, and respite services (both in-home and out-of-home)
- Supplies (non-food) –customized living and foster care services

Facility/Equipment Factor – Adult Day Services

Navigant calculated this factor for each adult day provider, by taking the following steps:

Step One: Removed the following surveys from the analysis:

- Surveys from providers with adult day service costs *and* residential service costs – this exclusion limits the possibility that room and board costs were inappropriately allocated to adult day services.
- Surveys from providers with no facility or equipment costs

Step Two: Calculated provider-specific facility/equipment factor by dividing individual provider-specific facility and equipment costs by provider-specific total program employee salaries, wages and benefits, specifically:

Total rental and property expenses, maintenance and repairs, depreciation and amortization, and utilities

Total direct care, supervisor, and program employee salaries and wages and benefits¹⁵, and non-food contracted program services

Step Three: Removed surveys from the analysis with facility/equipment factors over 40 percent, under the assumption the provider incorrectly reported its costs

Step Four: Identified the median provider factor

The provider survey data yielded a 16.20 facility/equipment factor for adult day services, based on 11 surveys.

¹⁵ Benefit costs calculated by applying the median benefits factor from all providers to the admin employee salaries and wages

Food, Supplies and Transportation Factor – Adult Day Services

Navigant calculated this factor for each adult day providers, by taking the following steps:

Step One: Removed the following surveys from the analysis:

- Surveys from providers with adult day service costs *and* residential service costs – this exclusion limits the possibility that room and board costs were inappropriately allocated to adult day services.
- Surveys with no food, supplies or transportation costs

Step Two: Calculated the factor for each provider using the below formula:

$$\frac{\text{Total program employee salaries and wages and benefits,}^{16} \text{ food supplies, other supplies, transportation costs, and vehicle related insurance}}{\text{Total direct care, supervisor, and program employee salaries and wages and benefits}^{17}, \text{ and non-food contracted program services}}$$

Step Three: Removed surveys from the analysis with facility/equipment factors over 40 percent, under the assumption the provider incorrectly reported its costs

The provider survey data yielded a 19.01 factor for adult day services, based on 17 surveys. Stakeholders discussed the fact that the HCBS Settings Rules requires greater community integration opportunities for this setting, which is likely to result in higher transportation costs to providers. Instead of using the median result of this factor from the cost surveys, DHS could consider using the 70th percentile of the survey results, which is 24 percent.

Supplies and Transportation Factor – Chore, Companion, Homemaker, Individual Community Living Support, and Respite Services (both in-home and out-of-home)

Navigant calculated this factor for providers that reported costs for one or more of the following services: chore, companion, homemaker, individual community living support, or respite (both in-home and out-of-home). We followed the below steps:

Step One: Calculated the factor for each provider using the below formula:

$$\frac{\text{Total other supplies, transportation costs, and vehicle related insurance}}{\text{Total direct care, supervisor, and program employee salaries and wages and benefits}^{18}, \text{ and contracted program services}}$$

¹⁶ Benefit costs calculated by applying the median benefits factor from all providers to the admin employee salaries and wages

¹⁷ Ibid

¹⁸ Ibid

Step Two: Removed surveys from the analysis with factors over 40 percent, under the assumption the provider incorrectly reported its costs

The provider survey data yielded a 1.56 factor, based on 17 surveys.

Non-food supplies - for customized living and adult foster care services

Navigant calculated this factor for each customized living and adult foster care provider, by taking the following steps:

Step One: Calculated provider-specific non-facility supplies factor by other supplies (non-food) by provider-specific total program employee salaries, wages and benefits, specifically:

Total other supplies

Total direct care, supervisor, and program employee salaries and wages and benefits¹⁹, and non-food contracted program services

Step Two: Removed surveys from the analysis with factors of 0 or over 40 percent, under the assumption the provider incorrectly reported its non-food supply costs

This factor is not meant to include supplies for individual participants that are separately billable to Medicaid; providers were instructed to record costs only specific to the delivery of customized living and adult foster care HCBS.

The provider survey data yielded a 3.39 factor, based on 20 surveys.

3.6.4 Adult Day Meal Add-on

Minnesota Statute applies \$0.63 per 15-minutes for adult day meal costs, which calculates to \$2.52 per hour or \$15.12 for six hours of service. For comparison, Navigant used provider survey data to calculate median per 15-minute adult day service meal cost as follows:

Step One: Identified surveys with adult day service costs and that included only Medicaid as a revenue source (allowing for an “apples to apples” comparison between provider cost data and units in Medicaid claims data)

Step Two: Identified total adult day service billable units from Medicaid claims data based on the same time periods as the provider fiscal year

Step Three: Identified total adult day service meal costs from provider survey data

Step Four: For each provider, divided total adult day service meal costs by the number of billable units

¹⁹ Benefit costs calculated by applying the median benefits factor from all providers to the admin employee salaries and wages

Step Five: Removed providers with no paid units of adult day services

This analysis yielded an average per 15-minute adult day service meal cost of \$0.81 using six surveys. As this adult day meal cost analysis was based off of six surveys, we do not recommend using these calculated values.

3.6.5 Recommendation – Factors Related to Facilities, Equipment, Food, Supplies, and Transportation

Navigant recommends the use of service-specific grouped factors to account for the costs of facilities, equipment, food, supplies and transportation related to delivery of the services under evaluation, as listed in the below table. This approach mirrors other waiver programs’ recognition of these costs in their corresponding rate methodologies, including MN DWRS.

Table 3.9: Recommended Factors Related to Facilities, Equipment, Food, Supplies and Transportation

| Service(s) | Factor Name | Factor Value |
|---|--|--------------|
| Adult Day Services | Facility/equipment factor | 16.20% |
| Adult Day Services | Food, other supplies and transportation factor | 19.01% |
| Chore, companion, homemaker, individual community living support, and respite services (both in-home and out-of-home) | Supplies (non-food) and transportation | 1.56% |
| Customized living and foster care services | Supplies (non-food) | 3.39% |

The use of these factors means that the \$0.63 add-on for adult day meals is no longer needed.

3.7 Absence Factor For Adult Day Services

An absence factor addresses provider costs associated with missed services by individuals who were originally scheduled to receive the service. The rate methodologies in Statute do not include any absence factors.

3.7.1 Absence Factor in MN DWRS for Day Services

DHS Disability Services Division (DSD) completed an analysis of an absence factor for day services (adult day, day treatment and habilitation and prevocational services) and found a value of 4.5 percent. DHS calculated the factor by analyzing data from DHS paid service claims to determine the incidence of unplanned absences in day services for DHS’ disability waivers. The claims data analysis yielded an average absence ratio of 5.7 percent; DHS applied an 80 percent fixed cost adjustment to account for the percentage of a provider’s total costs that are

fixed regardless of program attendance. Applying the 80 percent to the 5.7 percent resulted in a factor of 4.5 percent.²⁰

3.7.2 Adult Day Services Absences in Provider Survey Data

Navigant reviewed data submitted by providers on the cost survey related to absences for adult day services. Specifically, survey respondents reported the typical scheduled participants for adult day groups and the typical scheduled attendees for adult day groups. Navigant calculated a median absence ratio of 16.6 percent, which is reduced to a factor of 13.3 after applying DHS' 80 percent fixed cost policy adjustment.

Table 3.9: Absence Factor Calculated in Provider Survey Data

| Is this group specific for Individual's with Alzheimer's / Dementia? | Number of Groups | Typical Scheduled Participants | Typical Scheduled Attendees | Attendance Percentage | Absence Factor |
|--|------------------|--------------------------------|-----------------------------|-----------------------|----------------|
| No | 30 | 691 | 573.5 | 83.0% | 1.17 |
| Yes | 16 | 531 | 446.0 | 84.0% | 1.16 |
| Grand Total | 46 | 1,222 | 1,019.5 | 83.4% | 1.166 |

3.7.3 Recommendation – Adult Day Services Absence Factor

To establish consistency across waiver programs, Navigant recommends using the MN day services absence factor of 4.5 percent for adult day services and other services under evaluation that have high client absentee rates, as identified by DHS. Navigant also suggests that DHS consider a similar claims data analysis for ADS and other services to validate and refine this approach. While the provider survey data points to an issue with absences, provider practices regarding the reporting of the number of scheduled versus attending recipients likely varies widely.

²⁰ Minnesota Department of Human Services. Disability Waiver Rate System Absence Factor in Day Services Study. January 2018. Available online: https://mn.gov/dhs/assets/2018-01-DWRS-absence-factor-report_tcm1053-323920.pdf

Section IV Home-Delivered Meals

The EW and AC programs include as a covered service an appropriate, nutritionally balanced meal that is delivered to the person’s home, referred to as a home-delivered meal (HDM). These meals must be modified, as needed, to the participant’s dietary requirements and contain at least one-third of the current Recommended Dietary Allowance (RDA) as established by the Food and Nutrition Board of the National Academy of Sciences, National Research Council.

4.1 Home-Delivered Meal Rate in Statute

The Statute includes an HDM rate of \$9.30 and further specifies that – starting July 1, 2018 – the HDM rate must be increased every July 1 by the percent increase in the nursing facility per diem using the two most recent and available nursing cost report.

4.2 Home-Delivered Meal Costs Reported by Providers

Navigant used provider cost survey data from nine providers to calculate a per meal cost for HDMs for comparison to the \$9.30 rate in Statute. The survey data included costs related to HDMs, (for example personnel salaries, meal delivery costs, building costs, raw food costs, etc.) and the total number of HDM meals delivered. Providers were not asked to estimate what they would have had to pay for volunteer hours or donated items if those donations of time or items had not been made. Additionally, providers were not asked to separate costs across different payer types. Navigant assumes that the cost per meal is fairly constant across payors.

While 16 providers submitted surveys with HDM cost data, three surveys were excluded from the calculation due to missing data and four surveys were excluded due to per meal costs that appeared to reflect inaccurately reported data (one survey reflected a per meal cost of over \$200 while three others had per meal costs of less than \$4).

Navigant used the survey data submitted to calculate HDM costs in two ways:

- Summed total cost for home-delivered meals across all surveys and divided by a sum of reported meals per year across all providers – this calculation yielded a per meal cost of \$7.10
- For each survey, divided the total HDM cost by the total number of reported meals. The average and median costs per meal were \$7.76 and \$8.17, respectively.

The below table summarizes the values identified during our analysis.

Table 4.1: Provider Survey Calculations, Home-Delivered Meal

| Total HDM Costs/Number of Meals (all surveys) | Average HDM Cost | Median HDM Cost | Minimum Cost/Meal | Maximum Cost/Meal |
|---|------------------|-----------------|-------------------|-------------------|
| \$7.10 | \$7.76 | \$8.17 | \$4.93 | \$9.62 |

4.2 Home-Delivered Meal Rates in Other States

A targeted survey of other states’ HDM rates indicates that the provider survey responses fall within the range of other states’ experiences, as illustrated in Table 4.2 below.

Table 4.2: Survey of HDM Cost Per Meal In Other States

| State | Average HDM Cost/Meal | Median HDM Cost/Meal |
|----------------------------|-----------------------|----------------------|
| Colorado (2018 Projected) | \$7.09 | \$7.94 |
| Wisconsin (2018 Projected) | \$10.23 | \$8.80 |
| Georgia (FY 17) | \$6.29 | \$6.68 |
| Arizona (FY 17) | \$4.63 | \$4.73 |
| Survey Response Results | \$7.76 | \$8.17 |

4.3 Inflation Factor for HDM

Current Statute applies an annual inflation factor to HDMs based on DHS’ Nursing Facility (NF) Dietary Per Diem. The NF Dietary Per Diem factor includes raw food and other dietary costs such as dietary staff wages and benefits. To determine the appropriateness of this factor, Navigant reviewed three additional inflation factors as described below.

4.3.1 Consumer Price Index (CPI) for Food

The CPI for food inflation rate is based on a survey of what households are buying and is calculated from the mid-point of each fiscal year using BLS data from: *Food in U.S. city average, all urban consumers, seasonally adjusted*. The CPI for food includes “the retail prices of food items only” and does not address any non-food costs associated with HDM²¹. Table 4.2 compares the CPI for food against the NF Dietary Per Diem.

4.3.2 Personal Consumption Expenditures Index (PCE)

The PCE is calculated by the Bureau of Economic Analysis (BEA) and is used by some states to inflate HDM rates. Like the CPI for food, the PCE is calculated by pricing a group of goods. However, there are important distinctions between the two. For example, the PCE is based on reported surveys of what businesses are selling, the PCE includes expenditures for health insurance, which the CPI for food excludes, and the PCE tries to account for substitution

²¹ United States Department of Agriculture. Food Price Outlook. October 25, 2018. Available online: <https://www.ers.usda.gov/data-products/food-price-outlook/>

between goods when one good gets more expensive²². The PCE also costs for housing, apparel, recreation, and education and communication, which do not align with HDM service delivery.²³

4.3.3 Nursing Facility Raw Food Per Diem

DHS also calculates a NF Raw Food Per Diem, which excludes the non-food costs included in NF food delivery.

Table 4.3 below compares the CPI food inflation factor to the NF dietary per diem and NF raw food per diem. The PCE is not included in this table due to its inclusion of housing, apparel, recreation and education and communication costs.

Table 4.3: Comparison of Selected Inflation Factors

| Year | Food CPI Inflation | NF Dietary Per Diem Inflation | NF Raw Food Per Diem Inflation |
|------|--------------------|-------------------------------|--------------------------------|
| 2011 | 1.67% | 3.63% | 7.18% |
| 2012 | 4.53% | 2.35% | 3.61% |
| 2013 | 1.71% | 0.85% | 0.87% |
| 2014 | 1.06% | 3.23% | 3.82% |
| 2015 | 3.32% | 1.28% | -0.35% |
| 2016 | 0.81% | 3.93% | 0.45% |

4.4 Recommendation – Home-Delivered Meals

After a review of the cost survey data and a comparison to other states, the data does not support the current home-delivered meal of rate of \$9.30. Both the average and the median in the cost survey data were less than the \$9.30 rate. Additionally, the state comparison data showed the highest median cost/meal as \$8.80. Navigant recommends changing the cost per meal to \$8.17, the median of the cost survey data.

Navigant also recommends the continued use of the NF Dietary Per Diem for the inflation factor as this factor is Minnesota-specific and is based on audited financials and accounts for both food costs and non-food costs involved with preparing and delivering meals. Navigant also recommends that the inflation adjustment be applied on January 1 of each year, rather than July 1, to align with other HCBS rate increases.

²² Federal Reserve Bank of Cleveland. PCE and CPI Inflation. April 17, 2014. Available online: <https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140417-pce-and-cpi-inflation-whats-the-difference.aspx>

²³ Comparing Price Measures – The CPI and the PCE Price Index. July 16-17, 2018. Brown, Kyle.

Section V Adult Day Demand Projections

Navigant developed projections of adult day services and costs from SFYs 2018 to 2022 using the following data:

- Adult day claims data for EW, AC and ECS, SFY 2015 – 2017
- Waiver enrollment data for EW, AC, and ECS, SFY 2015 – 2017
- Minnesota census data by county, age, and sex from 2015 to 2050
- Minnesota U.S. Census Bureau regional classifications

Navigant combined the following data and assumptions to develop projections of future utilization and costs:

- Historical enrollment rates by program, age sex category, and region
- Minnesota census population projections by age, sex, and region
- Historical average utilization per enrollee
- Assumptions for unit cost trends and utilization trends
- Unit cost trends: Latest developed rates (1/1/2019) with 0.5 percent annual trend
- Utilization trends – EW and ECS: Six percent
- Utilization trends – AC: Two percent

Tables 5.1 and 5.2 show historic and projected member months by program and historic and projected expenditures by service.

Table 5.1: Program Enrollment Projections Summary (Member Months per SFY)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| EW | 288,151 | 290,045 | 302,747 | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 |
| AC | 33,421 | 31,653 | 31,444 | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 |
| ECS | 672 | 3,581 | 3,345 | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 |
| Total | 322,244 | 325,279 | 337,536 | 347,636 | 357,751 | 367,508 | 377,104 | 387,049 |

Table 5.2: Expenditure Projections (Millions)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Adult Day Services - 15 min | \$31.8 | \$34.2 | \$39.5 | \$40.2 | \$44.3 | \$45.7 | \$47.2 | \$48.9 |
| Adult Day Services – Daily | \$0.3 | \$0.4 | \$0.4 | \$0.4 | \$0.5 | \$0.5 | \$0.5 | \$0.5 |
| Adult Day Services – Bath | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.1 |
| Family Adult Day Services (15 min and daily) | \$0.5 | \$0.0 | \$0.0 | \$ - | \$ - | \$- | \$ - | \$- |
| Total | \$32.7 | \$34.7 | \$40.0 | \$40.8 | \$44.9 | \$46.3 | \$47.8 | \$49.5 |

High level analysis beyond the enrollment and expenditure projections indicates the following:

- Hennepin and Ramsey counties have had consistently higher utilization than most other counties. Projections anticipate this gap to continue through SFY 2022.
- Rural and micropolitan²⁴ counties have had consistently lower utilization than most other counties.
- Adult day services have had steady utilization and payment growth under EW but have been much less consistent under AC and ECS.

For further analysis and details on the methodology, please see the complete adult day projection report found in Appendix C.

²⁴ At least one urbanized area of at least 10,000 or more residents, but less than 50,000 residents

Section VI: Other States' Adult Day Reimbursement Methodologies

Generally speaking, states have various fee-for-service payment methodologies that can be characterized as one of three models:

1. Flat rate for all providers of the same service
2. Standard rate with some variation based on factors such as:
 - a. Level of need of participants and resulting service requirements
 - b. Geographic adjustment
 - c. Other factors, such as wage adjustments
3. Provider-specific rate:
 - a. Negotiated with the state; or
 - b. Based upon facility cost-reports

Variation in adult day service rate methodologies may include differentiated billing increments (i.e., per diem, half day, fifteen-minute units); geographic variations based upon urban and rural areas; rate add-ons for specific purposes; and modifications based upon the intensity of services required.

Two core adult day service models exist nationally and, depending on the state, may be specifically defined and assigned different payment rates. States call these models by different names, but CMS categorizes them as “Adult Day Health” and “Adult Day Social” for purposes of the national HCBS service taxonomy. One of the defining characteristics of the Adult Day Social model is an intersection of health, rehabilitative, and *social* supports; however, there are several key distinctions beyond those factors. The social model tends to have less clinical oversight whereas the health model tends to have greater availability of skilled nursing, including medication administration, wound care, and related services. Many states will identify the services as Adult Day Health or Adult Day Social in their regulations and service definitions, thus creating some definitive distinctions between the models. Some states do not have a clear distinction between these models; however, they may require higher levels of medical supports or staff ratios for centers serving individuals with higher need. DHS does not distinguish between these two models in its service definitions for adult day services.

Appendix D provides state-specific detail regarding adult day service payment methodologies. DHS also contracted with Navigant to develop a separate study of adult day service delivery. This separate study included recommendations regarding changes to the current adult day service definition to align service design with intended service objectives and outcomes, and data-based measures that DHS could consider using to monitor the demonstrated impact of adult day services and outcomes for adult day participants.

**Appendix A: Base Wage and Additional Cost Factors by Service in Statute
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services**

The following exhibit describes, by service, the related base wages and additional cost factors in Statute.

| Service | Base Wage | Additional Cost Factors |
|---|--|---|
| Adult Day Services (up to 12 hours per day) | 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) <i>Multiply by .25 (1:4 staffing ratio)</i> | Payroll Taxes & Benefits General & Administrative (20%) Program Plan Support RN Management & Supervision Meal Cost (\$.63/15 minute unit) |
| Adult Day Services – bath | 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) | Payroll Taxes & Benefits General & Administrative (20%) Program Plan Support RN Management & Supervision Meal Cost (\$.63/15-minute unit) |
| Chore | 100% landscaping and grounds keeping workers (SOC code 37-3011) | Payroll Taxes & Benefits General & Administrative Program Plan Support Social Worker Supervision |
| Companion | 50% personal and home care aides (SOC code 39-9021) 50% maids and housekeeping cleaners (SOC code 37-2012) | Payroll Taxes & Benefits General & Administrative Program Plan Support Social Worker Supervision |
| Homemaker – cleaning Homemaker – home management Homemaker – personal care | 60% personal and home care aide (SOC code 39-9021) 20% nursing assistants (SOC code 31-1014) 20% maids and housekeeping cleaners (SOC code 37-2012) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |
| Individual Community Living Support | 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) | Payroll Taxes & Benefits General & Administrative Program Plan Support Social Worker Supervision |
| Respite – in-home Respite – out-of-home | 5% registered nurses (SOC code 29-1141) 75% nursing assistants (SOC code 31-1014) 20% licensed practical nurse (SOC code 29-2061) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |

**Appendix A: Base Wage and Additional Cost Factors by Service in Statute
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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| Residential Services Component Service | Base Wage | Additional Cost Factors |
|--|--|---|
| Home Management and Support Services | 33.33% personal and home care aide (SOC code 39-9021) 33.33% food preparation workers (SOC code 35-2021) 33.34% maids and housekeeping cleaners (SOC code 37-2012) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |
| Medication Setups by Licensed Nurse | 10% licensed practical nurse (SOC code 29-2061) 90% registered nurse (SOC code 29-1141) | Payroll Taxes & Benefits General & Administrative Program Plan Support |
| Home Care Aide | 50% home health aides (SOC code 31-1011) 50% nursing assistants (SOC code 31-1014) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |
| Home Health Aide | 20% licensed practical nurses (SOC code 29-2061) 80% nursing assistants (SOC code 31-1014) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |
| Socialization | 33.33% personal and home care aide (SOC code 39-9021) 33.33% food preparation workers (SOC code 35-2021) 33.34% maids and housekeeping cleaners (SOC code 37-2012) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |
| Transportation – driver | 33.33% personal and home care aide (SOC code 39-9021) 33.33% food preparation workers (SOC code 35-2021) 33.34% maids and housekeeping cleaners (SOC code 37-2012) | Payroll Taxes & Benefits General & Administrative Program Plan Support RN Management & Supervision |

The home delivered meals rate is set in statute at \$9.30.

The registered nurse base wage equals 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI Metro average wage for registered nurses (SOC code 29-1141).

The social worker base wage equals 100 percent of the Minneapolis-St. Paul-Bloomington, MN-WI Metro average wage for medical and public health social workers (SOC code 21-1022).

**Appendix B: Rate Formulas Per Minnesota Statute 256B.0915, Subdivisions 11-17
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services**

This appendix provides the rate formulas by service as described in Minnesota Statute.

Medication Setups by Licensed Nurse, Registered Nurse and Social Worker Services

$$\text{Component Rate} = \text{Position Base Wage} + \left(\text{Position Base Wage} * \text{Payroll Taxes and Benefit Factor} \right) + \left(\text{Position Base Wage} * \text{G\&A Factor} \right) + \left(\text{Position Base Wage} * \text{Program Plan Support Factor} \right)$$

Home Management and Support Services, Home Care Aide and Home Health Aide Services

$$\text{Component Rate} = \text{Position Base Wage} + \left(\text{Position Base Wage} * \text{Payroll Taxes and Benefit Factor} \right) + \left(\text{Position Base Wage} * \text{G\&A Factor} \right) + \left(\text{Position Base Wage} * \text{Program Plan Support Factor} \right) + \text{Supervision Factor}$$

This rate is also used for socialization and transportation component rates under EW customized living.

Chore Services, Companion Services, Homemaker and Assistance with Personal Care, Homemaker and Cleaning and Homemaker and Home Management Services, Individual Community Living Support Rate, and In-Home Respite Care and Out-of-Home Respite Care 15-Minute Unit

$$\text{Component Rate} = \frac{\text{Position Base Wage} + \left(\text{Position Base Wage} * \text{Payroll Taxes and Benefit Factor} \right) + \left(\text{Position Base Wage} * \text{G\&A Factor} \right) + \left(\text{Position Base Wage} * \text{Program Plan Support Factor} \right) + \text{Supervision Factor}}{4}$$

In-Home Respite Care and Out-of-Home Respite Care Services Daily Unit

$$\text{Component Rate} = \frac{\left(\text{Position Base Wage} + \left(\text{Position Base Wage} * \text{Payroll Taxes and Benefit Factor} \right) + \left(\text{Position Base Wage} * \text{G\&A Factor} \right) + \left(\text{Position Base Wage} * \text{Program Plan Support Factor} \right) + \text{Supervision Factor} \right) * 18}{4}$$

Home Delivered Meals Rate

Component Rate = \$9.30

This rate will increase every July 1 by the percent increase in the nursing facility dietary per diem using the two most recent cost reports.

**Appendix B: Rate Formulas Per Minnesota Statute 256B.0915, Subdivisions 11-17
 Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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Adult Day Services 15-Minute Unit Rate

$$\text{Component Rate} = \frac{\left(\text{Position Base Wage} + \left(\text{Position Base Wage} * \frac{\text{Payroll Taxes and Benefit Factor}}{4} \right) + \left(\text{Position Base Wage} * \frac{\text{G\&A Factor (20\%)}}{4} \right) + \left(\text{Position Base Wage} * \frac{\text{Program Plan Support Factor}}{4} \right) \right) * 0.25 + \text{Super-vision Factor} + \text{Cost of Meals } (\$0.63)}{4}$$

Staffing ratio is 1:4 (caregiver: client). May be authorized for up to 48 units, or 12 hours per day based on client and family caregiver needs.

Adult Day Services Bath 15-Minute Unit Rate

$$\text{Component Rate} = \frac{\left(\text{Position Base Wage} + \left(\text{Position Base Wage} * \frac{\text{Payroll Taxes and Benefit Factor}}{4} \right) + \left(\text{Position Base Wage} * \frac{\text{G\&A Factor (20\%)}}{4} \right) + \left(\text{Position Base Wage} * \frac{\text{Program Plan Support Factor}}{4} \right) \right) + \text{Super-vision Factor} + \text{Cost of Meals } (\$0.63)}{4}$$

Staffing ratio is 1:1 (caregiver: client). If a bath is authorized for an adult day services client, at least two 15-minute units must be authorized.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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Navigant was retained by the Department of Human Services (DHS) to assist with its Elderly Waiver and Related Programs rate evaluation. As part of this work, the Department requested a projection of adult day services. Navigant developed projections of adult day services and costs from State Fiscal Year (SFY) 2018 to 2022 using data from SFY 2015 to SFY 2017, Minnesota population projections, and other assumptions described below. The results of our projections are presented on the following pages.

Data Overview

Navigant requested three years of historical adult day enrollment and claim data (SFY 2015 - 2017). The enrollment data included member-level information such as birth date, sex, county, acuity level (acuity level), program, and enrollment dates. The claims data included services, payments, service type, service dates, and member-level information.

Methodology Overview - Historical Data Summaries

Navigant developed projections of adult day services separately for each program and service type. These are listed in Tables 1 and 2 below, respectively.

Table 1. Programs

| Program Name | Abbreviation |
|------------------------------|---------------------|
| Alternative Care | AC |
| Elderly Waiver | EW |
| Essential Community Supports | ECS |

Table 2. Service Types

| Service | Service Unit | CPT | Modifier |
|-----------------------------------|---------------------|------------|-----------------|
| Adult Day Services | 15 Minutes | S5100 | None |
| Adult Day Services - Daily | Daily (6+ hours) | S5100 | U7 |
| Adult Day Services - Bath | 15 Minutes | S5100 | TF |
| Family Adult Day Services | 15 Minutes | S5102 | None |
| Family Adult Day Services - Daily | Daily (6+ hours) | S5102 | U7 |

To develop the projections, Navigant first reviewed the historical data by service type, program, age, sex, county, and acuity level. The historical data by service type and program is summarized in Exhibits 1a - 1d. Member month counts on these worksheets and all other exhibits in this model are based on all enrolled program members, regardless of if they used adult day services.

Navigant then reviewed annual historical utilization by county. Due to limited enrollment in some areas, counties were combined using statistical analysis to develop credible regions. Final regions are presented in Table 3 below and a map of county to region can be found in Appendix A. Micropolitan regions were defined by the U.S. Census Bureau as regions with at least 10,000, but fewer than 50,000 residents. Rural regions have fewer than 10,000 residents while metropolitan regions have at least 50,000 residents.

Table 3 – Regions

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
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| Region Name |
|--------------------|
| Anoka |
| Carver |
| Dakota |
| Hennepin |
| Ramsey |
| Scott |
| Sherburne |
| Washington |
| Other Metropolitan |
| Micropolitan |
| Rural |

Historical utilization and payments by service, program and region can be found in Appendix B. After summarizing the data by region, program and service type, the next step was to analyze the data by acuity level, age, and sex. The impact of age and sex overlapped significantly with the acuity level. Therefore, we decided to summarize the data by age and gender to leverage the census data for developing utilization projections. We used statistical analysis and judgment to combine the data into age sex categories shown in Table 4 below. These same categories were applied to the data across all program and service types.

Table 4 - Age Sex Categories

| Female Age Categories | Male Age Categories |
|------------------------------|----------------------------|
| Females 65 and younger | Males 65 and younger |
| Female Age 66 - 70 | Male Age 66 - 70 |
| Female Age 71 - 75 | Male Age 71 - 75 |
| Female Age 76 - 80 | Male Age 76 - 80 |
| Female Age 81 - 85 | Male Age 81 - 85 |
| Female Age 86 - 90 | Male Age 86 - 90 |
| Female Age 91 -100 | Male Age 91 -100 |
| Females 101 and older | Males 101 and older |

We then summarized the historical data by age sex category, region, program, and service type to develop age sex factors. These factors measure how each age band is expected to use services compared to the statewide average. These factors were developed statewide by service and program to measure the differences in enrollment within each region. The factors are used to review the historical data trends without mixing utilization trends with changes in population and are applied to future enrollment projections (discussed next) to adjust projected utilization for anticipated changes in enrollment. For services with low utilization, factors were developed by combining utilization across programs and services as necessary to develop credible results. Age sex factors are found in Appendix C.

Methodology Overview - Projections

After summarizing the historical data, we next developed membership projections for SFY 2018 through SFY 2022 by comparing historical enrollment with Minnesota census data by age, sex, and region. We used historical program enrollment rates (members enrolled in each program

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divided by the total census population) to project forward future enrollment by region, age, and sex. To account for low membership volume and the change in the ECS program effective 1/1/2015, we used the most recent two or three years of data as appropriate to develop these program enrollment rates. The final enrollment projections, calculated as the total population in the census for each age, sex, and region multiplied by the program enrollment rate, are shown in Appendix D.

Population projections found in Appendix D were combined with the Age Sex factors in Appendix C to develop regional age/sex adjustments used in the projections of future costs. The regional factors can be shown on the individual model worksheets for each program and service type.

The final step to develop utilization projections was to multiply the historical utilization (by service type, program, and region), the change in age/sex factors, and the utilization trend. The results are shown by year on each individual model worksheet. For services other than Family Adult Day Services (15 minute and daily), we assumed a 6 percent annual increase in utilization for EW and ECS and a 2 percent annual increase in utilization for AC (based on a review of historical increases in utilization). For the Family Adult Day Services (15 minute and daily), we assumed no future utilization as this no longer appeared to be a covered service. Utilization trend factors are presented in Appendix E.

We then multiplied the expected utilization by assumed unit costs to develop total costs. We used proposed January 1, 2019 unit costs with a 0.5 percent annual unit cost trend for all future services. Unit cost trend assumptions are presented in Appendix E.

These projections do not account for additional adjustments that might be made in the future to the service delivery / payment system regarding acuity of care. For example, an increase in payments to reflect greater acuity levels might encourage additional demand for these services (as those individuals would otherwise be served in a residential setting). Such a change is not considered in our projections.

Disclosure

This worksheet describes the calculations performed to develop Minnesota Elderly Waiver and Related Programs adult day projections for SFY 2018 - 2022. This letter may not be appropriate for other purposes.

The information contained in these document, including the exhibits, has been prepared for the State of Minnesota Department of Human Services (“the Department”). Navigant’s work product is solely for the use and benefit of the Department in accordance with its statutory and regulatory requirements. Navigant makes no representations or warranties regarding its work product and assumes no duty or liability to any third parties who rely upon Navigant’s work product. Except for disclosure of deliverables pursuant to law or regulation, the Department shall not disclose Navigant’s work product to third parties without Navigant’s prior written consent. All disclaimers and assumptions stated in any Navigant deliverable shall not be removed from the deliverables prior to distribution to any third party. To the extent that the information contained in any Navigant deliverable provided hereunder is made public or provided to third parties, the entire deliverable should be released in its entirety without modification so as not to misrepresent or take out of context the data presented.

Limitations

In performing our analysis, we relied on data and other information provided to us by the Department. We have not audited or verified this data and other information. If the underlying

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Actual results will vary from our projections for many reasons. Experience should continue to be monitored on a regular basis, with modifications to rates or to the program as necessary.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
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Minnesota Department of Human Services

Exhibit 1a.1 - Adult Day Projections: All Programs - Eligible Member Months

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 322,244 | 325,279 | 337,536 | 347,636 | 357,751 | 367,508 | 377,104 | 387,049 |

Exhibit 1a.2 - Adult Day Projections: All Programs - Annual Utilization (in Units)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Adult Day Services | 9,611,746 | 10,220,495 | 11,755,597 | 11,865,604 | 12,985,539 | 13,346,700 | 13,707,440 | 14,121,203 |
| Adult Day Services - Daily | 99,833 | 106,675 | 127,016 | 125,315 | 137,181 | 140,997 | 144,811 | 149,184 |
| Adult Day Services - Bath | 13,653 | 12,116 | 11,543 | 13,708 | 14,178 | 14,589 | 15,000 | 15,562 |
| Family Adult Day Services | 11,604 | 1,570 | 71 | - | - | - | - | - |
| Family Adult Day Services - Daily | 155 | - | - | - | - | - | - | - |

Exhibit 1a.3 - Adult Day Projections: All Programs - Unit Cost

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | \$3.31 | \$3.35 | \$3.36 | \$3.39 | \$3.41 | \$3.43 | \$3.44 | \$3.46 |
| Adult Day Services - Daily | \$3.33 | \$3.35 | \$3.37 | \$3.39 | \$3.41 | \$3.43 | \$3.44 | \$3.46 |
| Adult Day Services - Bath | \$6.47 | \$6.63 | \$6.68 | \$7.58 | \$7.60 | \$7.64 | \$7.68 | \$7.71 |
| Family Adult Day Services | \$39.86 | \$19.38 | \$35.97 | N/A | N/A | N/A | N/A | N/A |
| Family Adult Day Services - Daily | \$35.99 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Exhibit 1a.4 - Adult Day Projections: All Programs - Total Projected Payments

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|
|---------|----------|----------|----------|----------|----------|----------|----------|----------|

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
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| | | | | | | | | |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Adult Day Services | \$31,801,196 | \$34,241,878 | \$39,461,956 | \$40,224,399 | \$44,280,688 | \$45,739,808 | \$47,210,962 | \$48,879,219 |
| Adult Day Services - Daily | \$332,829 | \$357,185 | \$427,628 | \$424,817 | \$467,786 | \$483,204 | \$498,756 | \$516,385 |
| Adult Day Services - Bath | \$88,382 | \$80,384 | \$77,095 | \$103,838 | \$107,750 | \$111,432 | \$115,139 | \$120,057 |
| Family Adult Day Services | \$462,506 | \$30,431 | \$2,554 | \$- | \$- | \$- | \$- | \$- |
| Family Adult Day Services - Daily | \$5,578 | \$- | \$- | \$- | \$- | \$- | \$- | \$- |
| Total | \$32,690,492 | \$34,709,878 | \$39,969,234 | \$40,753,055 | \$44,856,224 | \$46,334,444 | \$47,824,857 | \$49,515,661 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.
3. These projections do not account for additional adjustments that might be made in the future to the service delivery / payment system regarding acuity of care.

Exhibit 1b.1 - Adult Day Projections: Elderly Waiver - Eligible Member Months

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 288,151 | 290,045 | 302,747 | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 |

Exhibit 1b.2 - Adult Day Projections: Elderly Waiver - Annual Utilization (in Units)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| Adult Day Services | 9,297,566 | 9,902,330 | 11,446,134 | 11,535,647 | 12,638,794 | 12,990,463 | 13,342,447 | 13,745,368 |
| Adult Day Services - Daily | 95,503 | 104,655 | 126,020 | 122,769 | 134,509 | 138,252 | 141,998 | 146,286 |
| Adult Day Services - Bath | 10,399 | 9,827 | 9,885 | 11,211 | 11,557 | 11,896 | 12,240 | 12,720 |
| Family Adult Day Services | 10,448 | 1,570 | 71 | - | - | - | - | - |
| Family Adult Day Services - Daily | 155 | - | - | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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Exhibit 1b.3 - Adult Day Projections: Elderly Waiver - Unit Cost

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | \$3.31 | \$3.35 | \$3.36 | \$3.39 | \$3.41 | \$3.43 | \$3.44 | \$3.46 |
| Adult Day Services - Daily | 3.33 | 3.35 | 3.37 | 3.39 | 3.41 | 3.43 | 3.44 | 3.46 |
| Adult Day Services - Bath | 6.17 | 6.42 | 6.54 | 7.58 | 7.60 | 7.64 | 7.68 | 7.71 |
| Family Adult Day Services | 39.39 | 19.38 | 35.97 | N/A | N/A | N/A | N/A | N/A |
| Family Adult Day Services - Daily | 35.99 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Exhibit 1b.4 - Adult Day Projections: Elderly Waiver - Total Projected Payments

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Adult Day Services | \$30,758,549 | \$33,173,704 | \$38,421,382 | \$39,105,843 | \$43,098,287 | \$44,518,968 | \$45,953,860 | \$47,578,302 |
| Adult Day Services - Daily | 318,367 | 350,378 | 424,272 | 416,187 | 458,676 | 473,796 | 489,067 | 506,355 |
| Adult Day Services - Bath | 64,154 | 63,116 | 64,623 | 84,922 | 87,835 | 90,865 | 93,959 | 98,131 |
| Family Adult Day Services | 411,588 | 30,431 | 2,554 | - | - | - | - | - |
| Family Adult Day Services - Daily | 5,578 | - | - | - | - | - | - | - |
| Total | \$31,558,236 | \$33,617,629 | \$38,912,830 | \$39,606,952 | \$43,644,798 | \$45,083,629 | \$46,536,886 | \$48,182,788 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.
3. These projections do not account for additional adjustments that might be made in the future to the service delivery / payment system regarding acuity of care.

Exhibit 1c.1 - Adult Day Projections: Alternative Care - Eligible Member Months

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| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 33,421 | 31,653 | 31,444 | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 |

Exhibit 1c.2 - Adult Day Projections: Alternative Care - Annual Utilization (in Units)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 310,220 | 305,274 | 299,193 | 317,465 | 333,128 | 342,323 | 350,788 | 361,325 |
| Adult Day Services - Daily | 4,330 | 2,020 | 996 | 2,546 | 2,671 | 2,745 | 2,813 | 2,898 |
| Adult Day Services - Bath | 3,254 | 2,289 | 1,658 | 2,497 | 2,620 | 2,693 | 2,759 | 2,842 |
| Family Adult Day Services | 1,156 | - | - | - | - | - | - | - |
| Family Adult Day Services - Daily | - | - | - | - | - | - | - | - |

Exhibit 1c.3 - Adult Day Projections: Alternative Care - Unit Cost

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | \$3.32 | \$3.36 | \$3.36 | \$3.39 | \$3.41 | \$3.43 | \$3.44 | \$3.46 |
| Adult Day Services - Daily | 3.34 | 3.37 | 3.37 | 3.39 | 3.41 | 3.43 | 3.44 | 3.46 |
| Adult Day Services - Bath | 7.45 | 7.54 | 7.52 | 7.58 | 7.60 | 7.64 | 7.68 | 7.71 |
| Family Adult Day Services | 44.05 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Family Adult Day Services - Daily | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Exhibit 1c.4 - Adult Day Projections: Alternative Care - Total Projected Payments

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Adult Day Services | \$1,029,501 | \$1,024,867 | \$1,006,059 | \$1,076,208 | \$1,135,967 | \$1,173,159 | \$1,208,179 | \$1,250,694 |
| Adult Day Services - Daily | 14,462 | 6,807 | 3,357 | 8,630 | 9,110 | 9,408 | 9,689 | 10,030 |
| Adult Day Services - Bath | 24,229 | 17,268 | 12,473 | 18,916 | 19,915 | 20,567 | 21,181 | 21,926 |
| Family Adult Day Services | 50,918 | - | - | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
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Minnesota Department of Human Services

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|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Family Adult Day Services - Daily | - | - | - | - | - | - | - | - |
| Total | \$1,119,109 | \$1,048,943 | \$1,021,888 | \$1,103,754 | \$1,164,992 | \$1,203,133 | \$1,239,049 | \$1,282,649 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.
3. These projections do not account for additional adjustments that might be made in the future to the service delivery / payment system regarding acuity of care.

Exhibit 1d.1 - Adult Day Projections: Essential Community Supports - Eligible Member Months

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 672 | 3,581 | 3,345 | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 |

Exhibit 1d.2 - Adult Day Projections: Essential Community Supports - Annual Utilization (in Units)

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | 3,960 | 12,891 | 10,270 | 12,492 | 13,617 | 13,913 | 14,204 | 14,510 |
| Adult Day Services - Daily | - | - | - | - | - | - | - | - |
| Adult Day Services - Bath | - | - | - | - | - | - | - | - |
| Family Adult Day Services | - | - | - | - | - | - | - | - |
| Family Adult Day Services - Daily | - | - | - | - | - | - | - | - |

Exhibit 1d.3 - Adult Day Projections: Essential Community Supports - Unit Cost

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | \$3.32 | \$3.36 | \$3.36 | \$3.39 | \$3.41 | \$3.43 | \$3.44 | \$3.46 |
| Adult Day Services - Daily | N/A | N/A | N/A | 3.39 | 3.41 | 3.43 | 3.44 | 3.46 |
| Adult Day Services - Bath | N/A | N/A | N/A | 7.58 | 7.60 | 7.64 | 7.68 | 7.71 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | |
|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Family Adult Day Services | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Family Adult Day Services - Daily | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Exhibit 1d.4 - Adult Day Projections: Essential Community Supports - Total Projected Payments

| Service | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Adult Day Services | \$13,146 | \$43,307 | \$34,516 | \$42,348 | \$46,434 | \$47,682 | \$48,923 | \$50,224 |
| Adult Day Services - Daily | - | - | - | - | - | - | - | - |
| Adult Day Services - Bath | - | - | - | - | - | - | - | - |
| Family Adult Day Services | - | - | - | - | - | - | - | - |
| Family Adult Day Services - Daily | - | - | - | - | - | - | - | - |
| Total | \$13,146 | \$43,307 | \$34,516 | \$42,348 | \$46,434 | \$47,682 | \$48,923 | \$50,224 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.
3. These projections do not account for additional adjustments that might be made in the future to the service delivery / payment system regarding acuity of care.

Exhibit 2a.1 - Elderly Waiver Projections - Base Period Data (Adult Day Services (S5100) Utilization By Region)

| | Member Months (MMs) | Total Utilization | Average Age Sex Factor | Adjusted Monthly Utilization per Member |
|--|---------------------|-------------------|------------------------|---|
|--|---------------------|-------------------|------------------------|---|

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
|--------------------|----------------|----------------|----------------|------------------|------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 10,417 | 10,622 | 11,831 | 286,994 | 296,055 | 354,000 | 1.04 | 1.04 | 1.04 | 26.5 | 26.8 | 28.8 | 27.4 |
| Carver | 2,430 | 2,574 | 2,634 | 45,363 | 47,663 | 69,394 | 0.91 | 0.92 | 0.93 | 20.6 | 20.1 | 28.4 | 23.1 |
| Dakota | 13,802 | 13,823 | 14,537 | 407,957 | 464,431 | 502,607 | 0.99 | 1.00 | 0.99 | 29.8 | 33.6 | 34.8 | 32.8 |
| Hennepin | 73,473 | 75,703 | 81,232 | 5,358,973 | 5,560,070 | 6,682,222 | 1.09 | 1.08 | 1.08 | 67.1 | 68.0 | 76.2 | 70.6 |
| Ramsey | 36,615 | 37,943 | 40,738 | 2,616,635 | 2,832,883 | 3,052,963 | 1.08 | 1.08 | 1.08 | 66.2 | 69.3 | 69.4 | 68.3 |
| Scott | 3,482 | 3,660 | 4,021 | 126,981 | 130,851 | 171,705 | 0.99 | 0.97 | 0.98 | 36.7 | 36.8 | 43.8 | 39.3 |
| Sherburne | 2,448 | 2,526 | 2,501 | 21,988 | 21,210 | 14,229 | 0.92 | 0.93 | 0.92 | 9.8 | 9.1 | 6.2 | 8.3 |
| Washington | 5,754 | 5,818 | 6,419 | 108,052 | 126,840 | 167,492 | 0.95 | 0.95 | 0.95 | 19.7 | 23.1 | 27.3 | 23.5 |
| Rural | 40,966 | 39,299 | 39,399 | 64,492 | 64,853 | 61,855 | 0.94 | 0.94 | 0.93 | 1.7 | 1.8 | 1.7 | 1.7 |
| Micropolitan | 39,988 | 40,524 | 40,481 | 97,413 | 155,260 | 162,568 | 0.92 | 0.92 | 0.93 | 2.6 | 4.1 | 4.3 | 3.7 |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 162,718 | 202,214 | 207,099 | 0.93 | 0.94 | 0.95 | 3.0 | 3.7 | 3.7 | 3.5 |
| Total | 288,151 | 290,045 | 302,747 | 9,297,566 | 9,902,330 | 11,446,134 | 1.00 | 1.00 | 1.00 | 32.4 | 34.2 | 37.7 | 34.8 |

Exhibit 2a.2 - Elderly Waiver Projections – Projections (Adult Day Services (S5100) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|----------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 | 29.8 | 31.5 | 31.5 | 31.6 | 31.8 |
| Carver | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 | 22.3 | 23.6 | 23.7 | 23.9 | 24.1 |
| Dakota | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 | 34.3 | 36.3 | 36.3 | 36.5 | 36.8 |
| Hennepin | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 | 81.1 | 86.1 | 86.1 | 86.4 | 86.8 |
| Ramsey | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 | 78.1 | 82.9 | 82.9 | 83.2 | 83.7 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|------|------|------|------|------|------|------|------|------|------|
| Scott | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 | 40.2 | 42.5 | 42.5 | 42.7 | 43.1 |
| Sherburne | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 8.3 | 8.8 | 8.8 | 8.8 | 8.8 |
| Washington | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 | 23.5 | 24.8 | 24.8 | 24.9 | 25.1 |
| Rural | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 |
| Micropolitan | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | 3.7 | 3.9 | 3.9 | 3.9 | 3.9 |
| Other Metropolitan | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 3.5 | 3.7 | 3.7 | 3.7 | 3.7 |
| Total | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | 37.1 | 39.5 | 39.5 | 39.5 | 39.7 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 2b.1 - Elderly Waiver Projections - Base Period Data (Family Adult Day Services (S5102) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 10,417 | 10,622 | 11,831 | 421 | 134 | 12 | 1.04 | 1.04 | 1.04 | 0.0 | 0.0 | 0.0 | 0.0 |
| Carver | 2,430 | 2,574 | 2,634 | 53 | - | - | 0.91 | 0.92 | 0.93 | 0.0 | - | - | 0.0 |
| Dakota | 13,802 | 13,823 | 14,537 | 147 | 768 | - | 0.99 | 1.00 | 0.99 | 0.0 | 0.1 | - | 0.0 |
| Hennepin | 73,473 | 75,703 | 81,232 | 851 | 110 | 25 | 1.09 | 1.08 | 1.08 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ramsey | 36,615 | 37,943 | 40,738 | 2,941 | 276 | - | 1.08 | 1.08 | 1.08 | 0.1 | 0.0 | - | 0.0 |
| Scott | 3,482 | 3,660 | 4,021 | - | - | - | 0.99 | 0.97 | 0.98 | - | - | - | - |
| Sherburne | 2,448 | 2,526 | 2,501 | - | - | - | 0.92 | 0.93 | 0.92 | - | - | - | - |
| Washington | 5,754 | 5,818 | 6,419 | 64 | 14 | - | 0.95 | 0.95 | 0.95 | 0.0 | 0.0 | - | 0.0 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|---------------------------|---------|---------|---------|--------|-------|----|------|------|------|-----|-----|-----|-----|
| Rural | 40,966 | 39,299 | 39,399 | 539 | 4 | - | 0.94 | 0.94 | 0.93 | 0.0 | 0.0 | - | 0.0 |
| Micropolitan | 39,988 | 40,524 | 40,481 | 2,932 | - | - | 0.92 | 0.92 | 0.93 | 0.1 | - | - | 0.0 |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 2,500 | 264 | 34 | 0.93 | 0.94 | 0.95 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 288,151 | 290,045 | 302,747 | 10,448 | 1,570 | 71 | 1.00 | 1.00 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 |

Exhibit 2b.2 - Elderly Waiver Projections – Projections (Family Adult Day Services (S5102) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |
| Carver | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 | - | - | - | - | - |
| Dakota | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 | - | - | - | - | - |
| Hennepin | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 | - | - | - | - | - |
| Ramsey | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 | - | - | - | - | - |
| Scott | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Washington | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 | - | - | - | - | - |
| Rural | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | - | - | - | - | - |
| Micropolitan | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Other Metropolitan | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | - | - | - | - | - |
| Total | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 2c.1 - Elderly Waiver Projections - Base Period Data (Adult Day Services - Daily (S5100-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 10,417 | 10,622 | 11,831 | 888 | 1,608 | 408 | 1.04 | 1.04 | 1.04 | 0.1 | 0.1 | 0.0 | 0.1 |
| Carver | 2,430 | 2,574 | 2,634 | - | - | - | 0.91 | 0.92 | 0.93 | - | - | - | - |
| Dakota | 13,802 | 13,823 | 14,537 | 7,608 | 8,304 | 8,400 | 0.99 | 1.00 | 0.99 | 0.6 | 0.6 | 0.6 | 0.6 |
| Hennepin | 73,473 | 75,703 | 81,232 | 54,968 | 50,352 | 65,035 | 1.09 | 1.08 | 1.08 | 0.7 | 0.6 | 0.7 | 0.7 |
| Ramsey | 36,615 | 37,943 | 40,738 | 18,216 | 25,496 | 27,354 | 1.08 | 1.08 | 1.08 | 0.5 | 0.6 | 0.6 | 0.6 |
| Scott | 3,482 | 3,660 | 4,021 | - | - | - | 0.99 | 0.97 | 0.98 | - | - | - | - |
| Sherburne | 2,448 | 2,526 | 2,501 | - | - | 2,472 | 0.92 | 0.93 | 0.92 | - | - | 1.1 | 0.4 |
| Washington | 5,754 | 5,818 | 6,419 | 2,256 | 2,776 | 4,700 | 0.95 | 0.95 | 0.95 | 0.4 | 0.5 | 0.8 | 0.6 |
| Rural | 40,966 | 39,299 | 39,399 | - | - | - | 0.94 | 0.94 | 0.93 | - | - | - | - |
| Micropolitan | 39,988 | 40,524 | 40,481 | 1,856 | 2,496 | 3,145 | 0.92 | 0.92 | 0.93 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 9,711 | 13,623 | 14,506 | 0.93 | 0.94 | 0.95 | 0.2 | 0.3 | 0.3 | 0.2 |
| Total | 288,151 | 290,045 | 302,747 | 95,503 | 104,655 | 126,020 | 1.00 | 1.00 | 1.00 | 0.3 | 0.4 | 0.4 | 0.4 |

Exhibit 2c.2 - Elderly Waiver Projections – Projections (Adult Day Services - Daily (S5100-U7) Utilization By Region)

| | Member Months | Age Sex Factor | Monthly Projected Utilization per Member |
|--|---------------|----------------|--|
|--|---------------|----------------|--|

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| Region | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Carver | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 | - | - | - | - | - |
| Dakota | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 |
| Hennepin | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Ramsey | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Scott | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Washington | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Rural | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | - | - | - | - | - |
| Micropolitan | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other Metropolitan | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Total | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 2d.1 - Elderly Waiver Projections - Base Period Data (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 10,417 | 10,622 | 11,831 | - | - | - | 1.04 | 1.04 | 1.04 | - | - | - | - |
| Carver | 2,430 | 2,574 | 2,634 | - | - | - | 0.91 | 0.92 | 0.93 | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|---------------------------|---------|---------|---------|-----|---|---|------|------|------|-----|---|---|-----|
| Dakota | 13,802 | 13,823 | 14,537 | - | - | - | 0.99 | 1.00 | 0.99 | - | - | - | - |
| Hennepin | 73,473 | 75,703 | 81,232 | - | - | - | 1.09 | 1.08 | 1.08 | - | - | - | - |
| Ramsey | 36,615 | 37,943 | 40,738 | - | - | - | 1.08 | 1.08 | 1.08 | - | - | - | - |
| Scott | 3,482 | 3,660 | 4,021 | - | - | - | 0.99 | 0.97 | 0.98 | - | - | - | - |
| Sherburne | 2,448 | 2,526 | 2,501 | - | - | - | 0.92 | 0.93 | 0.92 | - | - | - | - |
| Washington | 5,754 | 5,818 | 6,419 | - | - | - | 0.95 | 0.95 | 0.95 | - | - | - | - |
| Rural | 40,966 | 39,299 | 39,399 | - | - | - | 0.94 | 0.94 | 0.93 | - | - | - | - |
| Micropolitan | 39,988 | 40,524 | 40,481 | - | - | - | 0.92 | 0.92 | 0.93 | - | - | - | - |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 155 | - | - | 0.93 | 0.94 | 0.95 | 0.0 | - | - | 0.0 |
| Total | 288,151 | 290,045 | 302,747 | 155 | - | - | 1.00 | 1.00 | 1.00 | 0.0 | - | - | 0.0 |

Exhibit 2d.2- Elderly Waiver Projections – Projections (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |
| Carver | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 | - | - | - | - | - |
| Dakota | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 | - | - | - | - | - |
| Hennepin | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 | - | - | - | - | - |
| Ramsey | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 | - | - | - | - | - |
| Scott | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Washington | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|--------------------|---------|---------|---------|---------|---------|------|------|------|------|------|---|---|---|---|---|
| Rural | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | - | - | - | - | - |
| Micropolitan | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Other Metropolitan | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 | - | - | - | - | - |
| Total | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 2e.1 - Elderly Waiver Projections - Base Period Data (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 10,417 | 10,622 | 11,831 | 320 | 230 | 76 | 1.04 | 1.04 | 1.04 | 0.0 | 0.0 | 0.0 | 0.0 |
| Carver | 2,430 | 2,574 | 2,634 | - | - | 8 | 0.92 | 0.94 | 0.96 | - | - | 0.0 | 0.0 |
| Dakota | 13,802 | 13,823 | 14,537 | 160 | 52 | 30 | 1.02 | 1.03 | 1.02 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hennepin | 73,473 | 75,703 | 81,232 | 2,014 | 1,843 | 1,508 | 1.06 | 1.06 | 1.05 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ramsey | 36,615 | 37,943 | 40,738 | 3,206 | 2,668 | 289 | 1.06 | 1.05 | 1.05 | 0.1 | 0.1 | 0.0 | 0.1 |
| Scott | 3,482 | 3,660 | 4,021 | - | - | 1,968 | 1.04 | 1.01 | 1.00 | - | - | 0.5 | 0.2 |
| Sherburne | 2,448 | 2,526 | 2,501 | - | - | - | 0.99 | 0.97 | 0.98 | - | - | - | - |
| Washington | 5,754 | 5,818 | 6,419 | - | - | 110 | 0.97 | 0.99 | 0.98 | - | - | 0.0 | 0.0 |
| Rural | 40,966 | 39,299 | 39,399 | 1,374 | 1,598 | 1,595 | 0.96 | 0.96 | 0.96 | 0.0 | 0.0 | 0.0 | 0.0 |
| Micropolitan | 39,988 | 40,524 | 40,481 | 1,183 | 1,586 | 1,861 | 0.95 | 0.94 | 0.95 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 2,142 | 1,850 | 2,440 | 0.95 | 0.95 | 0.95 | 0.0 | 0.0 | 0.0 | 0.0 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|--------------|---------|---------|---------|--------|-------|-------|------|------|------|-----|-----|-----|-----|
| Total | 288,151 | 290,045 | 302,747 | 10,399 | 9,827 | 9,885 | 1.00 | 1.00 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 |
|--------------|---------|---------|---------|--------|-------|-------|------|------|------|-----|-----|-----|-----|

Exhibit 2e.2 - Elderly Waiver Projections – Projections (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|-------------|-------------|-------------|--|------------|------------|------------|------------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Carver | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 | 0.91 | 0.91 | 0.90 | 0.90 | 0.91 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dakota | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 | 1.00 | 1.00 | 0.99 | 0.99 | 1.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hennepin | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 | 1.04 | 1.04 | 1.03 | 1.03 | 1.05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ramsey | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 | 1.04 | 1.03 | 1.03 | 1.03 | 1.04 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Scott | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Sherburne | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 | - | - | - | - | - |
| Washington | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 | 0.96 | 0.95 | 0.94 | 0.94 | 0.95 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rural | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Micropolitan | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 | 0.96 | 0.97 | 0.97 | 0.98 | 0.99 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other Metropolitan | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 | 0.95 | 0.96 | 0.97 | 0.97 | 0.98 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 | 0.99 | 1.00 | 1.00 | 1.00 | 1.01 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Exhibit 3a.1 – Alternative Care Projections – Base Period Data (Adult Day Services (S5100) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|---------------|---------------|-------------------|----------------|----------------|------------------------|-------------|-------------|---|------------|------------|------------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 2,327 | 2,339 | 2,381 | 29,214 | 32,681 | 35,069 | 1.02 | 1.02 | 1.02 | 12.4 | 13.6 | 14.5 | 13.5 |
| Carver | 567 | 548 | 503 | 7,245 | 11,017 | 8,915 | 1.03 | 1.06 | 1.08 | 12.4 | 18.9 | 16.3 | 15.8 |
| Dakota | 3,757 | 3,790 | 4,157 | 71,619 | 71,010 | 66,545 | 1.02 | 1.02 | 1.01 | 18.7 | 18.4 | 15.8 | 17.6 |
| Hennepin | 4,911 | 4,709 | 4,598 | 98,485 | 78,079 | 75,944 | 1.00 | 1.00 | 0.96 | 20.1 | 16.6 | 17.2 | 18.0 |
| Ramsey | 3,859 | 3,583 | 3,868 | 40,244 | 48,982 | 55,990 | 1.01 | 1.03 | 1.01 | 10.3 | 13.3 | 14.3 | 12.6 |
| Scott | 339 | 391 | 549 | 819 | 2,864 | 7,112 | 0.85 | 0.85 | 0.92 | 2.8 | 8.6 | 14.1 | 9.4 |
| Sherburne | 475 | 464 | 452 | 1,704 | - | 240 | 0.95 | 0.96 | 0.90 | 3.8 | - | 0.6 | 1.5 |
| Washington | 1,282 | 1,340 | 1,331 | 11,510 | 7,510 | 7,597 | 0.99 | 0.96 | 0.97 | 9.1 | 5.9 | 5.9 | 6.9 |
| Rural | 5,198 | 4,737 | 4,445 | 7,786 | 7,272 | 2,020 | 1.01 | 1.03 | 0.98 | 1.5 | 1.5 | 0.5 | 1.2 |
| Micropolitan | 3,942 | 3,684 | 3,360 | 15,337 | 13,902 | 15,061 | 1.01 | 1.03 | 0.99 | 3.9 | 3.7 | 4.5 | 4.0 |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | 26,257 | 31,957 | 24,700 | 0.98 | 0.99 | 0.99 | 4.0 | 5.3 | 4.3 | 4.5 |
| Total | 33,421 | 31,653 | 31,444 | 310,220 | 305,274 | 299,193 | 1.00 | 1.01 | 0.99 | 9.3 | 9.6 | 9.6 | 9.5 |

Exhibit 3a.2 – Alternative Care Projections – Projections (Adult Day Services (S5100) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 14.0 | 14.2 | 14.2 | 14.2 | 14.3 |
| Carver | 558 | 581 | 604 | 626 | 655 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | 17.2 | 17.5 | 17.5 | 17.4 | 17.5 |
| Dakota | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 | 18.1 | 18.4 | 18.4 | 18.4 | 18.5 |
| Hennepin | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 17.8 | 18.1 | 18.2 | 18.2 | 18.3 |
| Ramsey | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 | 13.0 | 13.2 | 13.2 | 13.2 | 13.3 |
| Scott | 511 | 539 | 566 | 591 | 615 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | 8.5 | 8.7 | 8.7 | 8.7 | 8.7 |
| Sherburne | 493 | 517 | 539 | 565 | 595 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Washington | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 6.7 | 6.9 | 6.9 | 6.9 | 6.9 |
| Rural | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|------|------|------|------|------|-----|-----|-----|-----|-----|
| Micropolitan | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | 4.1 | 4.2 | 4.2 | 4.2 | 4.2 |
| Other Metropolitan | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 4.5 | 4.6 | 4.6 | 4.6 | 4.7 |
| Total | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 9.6 | 9.8 | 9.8 | 9.8 | 9.9 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 3b.1 – Alternative Care Projections – Base Period Data (Family Adult Day Services (S5102) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|---------------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 2,327 | 2,339 | 2,381 | 70 | - | - | 1.02 | 1.02 | 1.02 | 0.0 | - | - | 0.0 |
| Carver | 567 | 548 | 503 | - | - | - | 1.03 | 1.06 | 1.08 | - | - | - | - |
| Dakota | 3,757 | 3,790 | 4,157 | - | - | - | 1.02 | 1.02 | 1.01 | - | - | - | - |
| Hennepin | 4,911 | 4,709 | 4,598 | 138 | - | - | 1.00 | 1.00 | 0.96 | 0.0 | - | - | 0.0 |
| Ramsey | 3,859 | 3,583 | 3,868 | - | - | - | 1.01 | 1.03 | 1.01 | - | - | - | - |
| Scott | 339 | 391 | 549 | - | - | - | 0.85 | 0.85 | 0.92 | - | - | - | - |
| Sherburne | 475 | 464 | 452 | - | - | - | 0.95 | 0.96 | 0.90 | - | - | - | - |
| Washington | 1,282 | 1,340 | 1,331 | - | - | - | 0.99 | 0.96 | 0.97 | - | - | - | - |
| Rural | 5,198 | 4,737 | 4,445 | 573 | - | - | 1.01 | 1.03 | 0.98 | 0.1 | - | - | 0.0 |
| Micropolitan | 3,942 | 3,684 | 3,360 | 353 | - | - | 1.01 | 1.03 | 0.99 | 0.1 | - | - | 0.0 |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | 22 | - | - | 0.98 | 0.99 | 0.99 | 0.0 | - | - | 0.0 |
| Total | 33,421 | 31,653 | 31,444 | 1,156 | - | - | 1.00 | 1.01 | 0.99 | 0.0 | - | - | 0.0 |

Exhibit 3b.2 – Alternative Care Projections – Projections (Family Adult Day Services (S5102) Utilization By Region)

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------|-------------|-------------|-------------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | - | - | - | - | - |
| Carver | 558 | 581 | 604 | 626 | 655 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | - | - | - | - | - |
| Dakota | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 | - | - | - | - | - |
| Hennepin | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | - | - | - | - | - |
| Ramsey | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 | - | - | - | - | - |
| Scott | 511 | 539 | 566 | 591 | 615 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | - | - | - | - | - |
| Sherburne | 493 | 517 | 539 | 565 | 595 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | - | - | - | - | - |
| Washington | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | - | - | - | - | - |
| Rural | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 | - | - | - | - | - |
| Micropolitan | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |
| Other Metropolitan | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | - | - | - | - | - |
| Total | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 3c.1 – Alternative Care Projections – Base Period Data (Adult Day Services - Daily (S5100-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|-----------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 2,327 | 2,339 | 2,381 | 4,330 | 284 | - | 1.02 | 1.02 | 1.02 | 1.8 | 0.1 | - | 0.6 |
| Carver | 567 | 548 | 503 | - | - | - | 1.03 | 1.06 | 1.08 | - | - | - | - |
| Dakota | 3,757 | 3,790 | 4,157 | - | - | - | 1.02 | 1.02 | 1.01 | - | - | - | - |
| Hennepin | 4,911 | 4,709 | 4,598 | - | - | - | 1.00 | 1.00 | 0.96 | - | - | - | - |
| Ramsey | 3,859 | 3,583 | 3,868 | - | - | - | 1.01 | 1.03 | 1.01 | - | - | - | - |
| Scott | 339 | 391 | 549 | - | - | - | 0.85 | 0.85 | 0.92 | - | - | - | - |
| Sherburne | 475 | 464 | 452 | - | - | - | 0.95 | 0.96 | 0.90 | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|-------|-------|-----|------|------|------|-----|-----|-----|-----|
| Washington | 1,282 | 1,340 | 1,331 | - | 1,736 | 996 | 0.99 | 0.96 | 0.97 | - | 1.4 | 0.8 | 0.7 |
| Rural | 5,198 | 4,737 | 4,445 | - | - | - | 1.01 | 1.03 | 0.98 | - | - | - | - |
| Micropolitan | 3,942 | 3,684 | 3,360 | - | - | - | 1.01 | 1.03 | 0.99 | - | - | - | - |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | - | - | - | 0.98 | 0.99 | 0.99 | - | - | - | - |
| Total | 33,421 | 31,653 | 31,444 | 4,330 | 2,020 | 996 | 1.00 | 1.01 | 0.99 | 0.1 | 0.1 | 0.0 | 0.1 |

Exhibit 3c.2 – Alternative Care Projections – Projections (Adult Day Services - Daily (S5100-U7) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|---------------------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Carver | 558 | 581 | 604 | 626 | 655 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | - | - | - | - | - |
| Dakota | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 | - | - | - | - | - |
| Hennepin | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | - | - | - | - | - |
| Ramsey | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 | - | - | - | - | - |
| Scott | 511 | 539 | 566 | 591 | 615 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | - | - | - | - | - |
| Sherburne | 493 | 517 | 539 | 565 | 595 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | - | - | - | - | - |
| Washington | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Rural | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 | - | - | - | - | - |
| Micropolitan | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |
| Other Metropolitan | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | - | - | - | - | - |
| Total | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
 Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
 Minnesota Department of Human Services

Exhibit 3d.1 – Alternative Care Projections – Base Period Data (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|---------------|---------------|-------------------|----------|----------|------------------------|-------------|-------------|---|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 2,327 | 2,339 | 2,381 | - | - | - | 1.02 | 1.02 | 1.02 | - | - | - | - |
| Carver | 567 | 548 | 503 | - | - | - | 1.03 | 1.06 | 1.08 | - | - | - | - |
| Dakota | 3,757 | 3,790 | 4,157 | - | - | - | 1.02 | 1.02 | 1.01 | - | - | - | - |
| Hennepin | 4,911 | 4,709 | 4,598 | - | - | - | 1.00 | 1.00 | 0.96 | - | - | - | - |
| Ramsey | 3,859 | 3,583 | 3,868 | - | - | - | 1.01 | 1.03 | 1.01 | - | - | - | - |
| Scott | 339 | 391 | 549 | - | - | - | 0.85 | 0.85 | 0.92 | - | - | - | - |
| Sherburne | 475 | 464 | 452 | - | - | - | 0.95 | 0.96 | 0.90 | - | - | - | - |
| Washington | 1,282 | 1,340 | 1,331 | - | - | - | 0.99 | 0.96 | 0.97 | - | - | - | - |
| Rural | 5,198 | 4,737 | 4,445 | - | - | - | 1.01 | 1.03 | 0.98 | - | - | - | - |
| Micropolitan | 3,942 | 3,684 | 3,360 | - | - | - | 1.01 | 1.03 | 0.99 | - | - | - | - |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | - | - | - | 0.98 | 0.99 | 0.99 | - | - | - | - |
| Total | 33,421 | 31,653 | 31,444 | - | - | - | 1.00 | 1.01 | 0.99 | - | - | - | - |

Exhibit 3d.2 – Alternative Care Projections – Projections (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | - | - | - | - | - |
| Carver | 558 | 581 | 604 | 626 | 655 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | - | - | - | - | - |
| Dakota | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 | - | - | - | - | - |
| Hennepin | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | - | - | - | - | - |
| Ramsey | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 | - | - | - | - | - |
| Scott | 511 | 539 | 566 | 591 | 615 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | - | - | - | - | - |
| Sherburne | 493 | 517 | 539 | 565 | 595 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | - | - | - | - | - |
| Washington | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|------|------|------|------|------|---|---|---|---|---|
| Rural | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 | - | - | - | - | - |
| Micropolitan | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | - | - | - | - | - |
| Other Metropolitan | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | - | - | - | - | - |
| Total | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 3e.1 – Alternative Care Projections – Base Period Data (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|---------------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 2,327 | 2,339 | 2,381 | 154 | 162 | 78 | 1.02 | 1.02 | 1.02 | 0.1 | 0.1 | 0.0 | 0.1 |
| Carver | 567 | 548 | 503 | - | - | - | 1.03 | 1.06 | 1.08 | - | - | - | - |
| Dakota | 3,757 | 3,790 | 4,157 | 488 | 380 | 228 | 1.02 | 1.02 | 1.01 | 0.1 | 0.1 | 0.1 | 0.1 |
| Hennepin | 4,911 | 4,709 | 4,598 | 1,111 | 1,016 | 718 | 1.00 | 1.00 | 0.96 | 0.2 | 0.2 | 0.2 | 0.2 |
| Ramsey | 3,859 | 3,583 | 3,868 | 112 | 236 | 356 | 1.01 | 1.03 | 1.01 | 0.0 | 0.1 | 0.1 | 0.1 |
| Scott | 339 | 391 | 549 | - | - | - | 0.85 | 0.85 | 0.92 | - | - | - | - |
| Sherburne | 475 | 464 | 452 | - | - | - | 0.95 | 0.96 | 0.90 | - | - | - | - |
| Washington | 1,282 | 1,340 | 1,331 | 276 | 128 | 60 | 0.99 | 0.96 | 0.97 | 0.2 | 0.1 | 0.0 | 0.1 |
| Rural | 5,198 | 4,737 | 4,445 | 98 | 127 | 146 | 1.01 | 1.03 | 0.98 | 0.0 | 0.0 | 0.0 | 0.0 |
| Micropolitan | 3,942 | 3,684 | 3,360 | 708 | - | 52 | 1.01 | 1.03 | 0.99 | 0.2 | - | 0.0 | 0.1 |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | 307 | 240 | 20 | 0.98 | 0.99 | 0.99 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 33,421 | 31,653 | 31,444 | 3,254 | 2,289 | 1,658 | 1.00 | 1.01 | 0.99 | 0.1 | 0.1 | 0.1 | 0.1 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Exhibit 3e.2 - Alternative Care Projections - Projections (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Carver | 558 | 581 | 604 | 626 | 655 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 | - | - | - | - | - |
| Dakota | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Hennepin | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Ramsey | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Scott | 511 | 539 | 566 | 591 | 615 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 | - | - | - | - | - |
| Sherburne | 493 | 517 | 539 | 565 | 595 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 | - | - | - | - | - |
| Washington | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Rural | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Micropolitan | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other Metropolitan | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 4a.1 – Essential Community Supports Projections – Base Period Data (Adult Day Services (S5100) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|----------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 41 | 259 | 215 | 288 | 1,558 | 1,708 | 1.16 | 1.11 | 1.16 | 6.1 | 5.4 | 6.8 | 6.1 |
| Carver | 17 | 84 | 78 | - | - | - | 0.63 | 0.68 | 0.80 | - | - | - | - |
| Dakota | 42 | 242 | 313 | 360 | 1,628 | 3,546 | 1.14 | 1.14 | 1.05 | 7.5 | 5.9 | 10.8 | 8.6 |
| Hennepin | 153 | 675 | 456 | 2,592 | 8,699 | 3,264 | 1.11 | 1.10 | 1.11 | 15.2 | 11.7 | 6.5 | 10.3 |
| Ramsey | 49 | 260 | 181 | 120 | 24 | - | 1.13 | 0.99 | 0.88 | 2.2 | 0.1 | - | 0.3 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|---------------------------|-----|-------|-------|-------|--------|--------|------|------|------|------|------|-----|------|
| Scott | 8 | 14 | 12 | 600 | 216 | - | 1.31 | 1.23 | 1.26 | 57.2 | 12.6 | - | 18.6 |
| Sherburne | 3 | 22 | 44 | - | - | - | 1.50 | 1.16 | 1.19 | - | - | - | - |
| Washington | 3 | 70 | 108 | - | - | - | 1.26 | 1.04 | 1.09 | - | - | - | - |
| Rural | 146 | 696 | 681 | - | - | - | 0.88 | 0.96 | 0.97 | - | - | - | - |
| Micropolitan | 105 | 592 | 537 | - | 766 | 1,752 | 0.98 | 0.91 | 0.95 | - | 1.4 | 3.5 | 2.2 |
| Other Metropolitan | 105 | 667 | 720 | - | - | - | 1.02 | 0.95 | 0.94 | - | - | - | - |
| Total | 672 | 3,581 | 3,345 | 3,960 | 12,891 | 10,270 | 1.03 | 1.00 | 1.00 | 5.7 | 3.6 | 3.1 | 3.6 |

Exhibit 4a.2 – Essential Community Supports Projections – Projections (Adult Day Services (\$5100) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|---------------------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 218 | 224 | 230 | 236 | 241 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 5.8 | 6.1 | 6.1 | 6.1 | 6.2 |
| Carver | 67 | 70 | 73 | 75 | 78 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 | - | - | - | - | - |
| Dakota | 260 | 267 | 274 | 280 | 285 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 8.1 | 8.6 | 8.6 | 8.7 | 8.7 |
| Hennepin | 643 | 658 | 673 | 687 | 701 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | 9.9 | 10.5 | 10.5 | 10.5 | 10.6 |
| Ramsey | 272 | 277 | 282 | 286 | 291 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Scott | 40 | 42 | 44 | 46 | 48 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | 19.0 | 20.1 | 20.1 | 20.2 | 20.2 |
| Sherburne | 40 | 42 | 43 | 45 | 47 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | - | - | - | - | - |
| Washington | 122 | 126 | 130 | 134 | 137 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | - | - | - | - | - |
| Rural | 610 | 617 | 624 | 631 | 638 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Micropolitan | 557 | 567 | 577 | 586 | 596 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 |
| Other Metropolitan | 750 | 770 | 790 | 809 | 831 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Total | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | 3.5 | 3.7 | 3.7 | 3.7 | 3.7 |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
 Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
 Minnesota Department of Human Services

Exhibit 4b.1 – Essential Community Supports Projections – Base Period Data (Family Adult Day Services (S5102) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 41 | 259 | 215 | - | - | - | 1.16 | 1.11 | 1.16 | - | - | - | - |
| Carver | 17 | 84 | 78 | - | - | - | 0.63 | 0.68 | 0.80 | - | - | - | - |
| Dakota | 42 | 242 | 313 | - | - | - | 1.14 | 1.14 | 1.05 | - | - | - | - |
| Hennepin | 153 | 675 | 456 | - | - | - | 1.11 | 1.10 | 1.11 | - | - | - | - |
| Ramsey | 49 | 260 | 181 | - | - | - | 1.13 | 0.99 | 0.88 | - | - | - | - |
| Scott | 8 | 14 | 12 | - | - | - | 1.31 | 1.23 | 1.26 | - | - | - | - |
| Sherburne | 3 | 22 | 44 | - | - | - | 1.50 | 1.16 | 1.19 | - | - | - | - |
| Washington | 3 | 70 | 108 | - | - | - | 1.26 | 1.04 | 1.09 | - | - | - | - |
| Rural | 146 | 696 | 681 | - | - | - | 0.88 | 0.96 | 0.97 | - | - | - | - |
| Micropolitan | 105 | 592 | 537 | - | - | - | 0.98 | 0.91 | 0.95 | - | - | - | - |
| Other Metropolitan | 105 | 667 | 720 | - | - | - | 1.02 | 0.95 | 0.94 | - | - | - | - |
| Total | 672 | 3,581 | 3,345 | - | - | - | 1.03 | 1.00 | 1.00 | - | - | - | - |

Exhibit 4b.2 – Essential Community Supports Projections – Projections (Family Adult Day Services (S5102) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 218 | 224 | 230 | 236 | 241 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Carver | 67 | 70 | 73 | 75 | 78 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 | - | - | - | - | - |
| Dakota | 260 | 267 | 274 | 280 | 285 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Hennepin | 643 | 658 | 673 | 687 | 701 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | - | - | - | - | - |
| Ramsey | 272 | 277 | 282 | 286 | 291 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | - | - | - | - | - |
| Scott | 40 | 42 | 44 | 46 | 48 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 40 | 42 | 43 | 45 | 47 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | - | - | - | - | - |
| Washington | 122 | 126 | 130 | 134 | 137 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|---|---|---|---|---|
| Rural | 610 | 617 | 624 | 631 | 638 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Micropolitan | 557 | 567 | 577 | 586 | 596 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Other Metropolitan | 750 | 770 | 790 | 809 | 831 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Total | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 4c.1 – Essential Community Supports Projections – Base Period Data (Adult Day Services - Daily (S5100-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 41 | 259 | 215 | - | - | - | 1.16 | 1.11 | 1.16 | - | - | - | - |
| Carver | 17 | 84 | 78 | - | - | - | 0.63 | 0.68 | 0.80 | - | - | - | - |
| Dakota | 42 | 242 | 313 | - | - | - | 1.14 | 1.14 | 1.05 | - | - | - | - |
| Hennepin | 153 | 675 | 456 | - | - | - | 1.11 | 1.10 | 1.11 | - | - | - | - |
| Ramsey | 49 | 260 | 181 | - | - | - | 1.13 | 0.99 | 0.88 | - | - | - | - |
| Scott | 8 | 14 | 12 | - | - | - | 1.31 | 1.23 | 1.26 | - | - | - | - |
| Sherburne | 3 | 22 | 44 | - | - | - | 1.50 | 1.16 | 1.19 | - | - | - | - |
| Washington | 3 | 70 | 108 | - | - | - | 1.26 | 1.04 | 1.09 | - | - | - | - |
| Rural | 146 | 696 | 681 | - | - | - | 0.88 | 0.96 | 0.97 | - | - | - | - |
| Micropolitan | 105 | 592 | 537 | - | - | - | 0.98 | 0.91 | 0.95 | - | - | - | - |
| Other Metropolitan | 105 | 667 | 720 | - | - | - | 1.02 | 0.95 | 0.94 | - | - | - | - |
| Total | 672 | 3,581 | 3,345 | - | - | - | 1.03 | 1.00 | 1.00 | - | - | - | - |

Exhibit 4c.2 – Essential Community Supports Projections – Projections (Adult Day Services - Daily (S5100-U7) Utilization By Region)

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|---------------|--------------|--------------|--------------|--------------|----------------|-------------|-------------|-------------|-------------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 218 | 224 | 230 | 236 | 241 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Carver | 67 | 70 | 73 | 75 | 78 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 | - | - | - | - | - |
| Dakota | 260 | 267 | 274 | 280 | 285 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Hennepin | 643 | 658 | 673 | 687 | 701 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | - | - | - | - | - |
| Ramsey | 272 | 277 | 282 | 286 | 291 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | - | - | - | - | - |
| Scott | 40 | 42 | 44 | 46 | 48 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 40 | 42 | 43 | 45 | 47 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | - | - | - | - | - |
| Washington | 122 | 126 | 130 | 134 | 137 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | - | - | - | - | - |
| Rural | 610 | 617 | 624 | 631 | 638 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Micropolitan | 557 | 567 | 577 | 586 | 596 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Other Metropolitan | 750 | 770 | 790 | 809 | 831 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Total | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Exhibit 4d.1 – Essential Community Supports Projections – Base Period Data (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|----------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 41 | 259 | 215 | - | - | - | 1.16 | 1.11 | 1.16 | - | - | - | - |
| Carver | 17 | 84 | 78 | - | - | - | 0.63 | 0.68 | 0.80 | - | - | - | - |
| Dakota | 42 | 242 | 313 | - | - | - | 1.14 | 1.14 | 1.05 | - | - | - | - |
| Hennepin | 153 | 675 | 456 | - | - | - | 1.11 | 1.10 | 1.11 | - | - | - | - |
| Ramsey | 49 | 260 | 181 | - | - | - | 1.13 | 0.99 | 0.88 | - | - | - | - |
| Scott | 8 | 14 | 12 | - | - | - | 1.31 | 1.23 | 1.26 | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | |
|--------------------|------------|--------------|--------------|----------|----------|----------|-------------|-------------|-------------|----------|----------|----------|----------|
| Sherburne | 3 | 22 | 44 | - | - | - | 1.50 | 1.16 | 1.19 | - | - | - | - |
| Washington | 3 | 70 | 108 | - | - | - | 1.26 | 1.04 | 1.09 | - | - | - | - |
| Rural | 146 | 696 | 681 | - | - | - | 0.88 | 0.96 | 0.97 | - | - | - | - |
| Micropolitan | 105 | 592 | 537 | - | - | - | 0.98 | 0.91 | 0.95 | - | - | - | - |
| Other Metropolitan | 105 | 667 | 720 | - | - | - | 1.02 | 0.95 | 0.94 | - | - | - | - |
| Total | 672 | 3,581 | 3,345 | - | - | - | 1.03 | 1.00 | 1.00 | - | - | - | - |

Exhibit 4d.2 – Essential Community Supports Projections – Projections (Family Adult Day Services - Daily (S5102-U7) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|--------------------|---------------|--------------|--------------|--------------|--------------|----------------|-------------|-------------|-------------|-------------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 218 | 224 | 230 | 236 | 241 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Carver | 67 | 70 | 73 | 75 | 78 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 | - | - | - | - | - |
| Dakota | 260 | 267 | 274 | 280 | 285 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | - | - | - | - | - |
| Hennepin | 643 | 658 | 673 | 687 | 701 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 | - | - | - | - | - |
| Ramsey | 272 | 277 | 282 | 286 | 291 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 | - | - | - | - | - |
| Scott | 40 | 42 | 44 | 46 | 48 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 | - | - | - | - | - |
| Sherburne | 40 | 42 | 43 | 45 | 47 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 | - | - | - | - | - |
| Washington | 122 | 126 | 130 | 134 | 137 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 | - | - | - | - | - |
| Rural | 610 | 617 | 624 | 631 | 638 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Micropolitan | 557 | 567 | 577 | 586 | 596 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | - | - | - | - | - |
| Other Metropolitan | 750 | 770 | 790 | 809 | 831 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 | - | - | - | - | - |
| Total | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
 Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
 Minnesota Department of Human Services

Exhibit 4e.1 – Essential Community Supports Projections – Base Period Data (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months (MMs) | | | Total Utilization | | | Average Age Sex Factor | | | Adjusted Monthly Utilization per Member | | | |
|--------------------|---------------------|----------|----------|-------------------|----------|----------|------------------------|----------|----------|---|----------|----------|---------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | Average |
| Anoka | 41 | 259 | 215 | - | - | - | 1.11 | 1.11 | 1.16 | - | - | - | - |
| Carver | 17 | 84 | 78 | - | - | - | 0.71 | 0.55 | 0.82 | - | - | - | - |
| Dakota | 42 | 242 | 313 | - | - | - | 1.34 | 1.29 | 1.11 | - | - | - | - |
| Hennepin | 153 | 675 | 456 | - | - | - | 1.09 | 1.05 | 1.16 | - | - | - | - |
| Ramsey | 49 | 260 | 181 | - | - | - | 1.15 | 1.12 | 1.04 | - | - | - | - |
| Scott | 8 | 14 | 12 | - | - | - | 1.29 | 1.12 | 0.98 | - | - | - | - |
| Sherburne | 3 | 22 | 44 | - | - | - | 2.21 | 1.41 | 1.15 | - | - | - | - |
| Washington | 3 | 70 | 108 | - | - | - | 0.98 | 0.84 | 1.03 | - | - | - | - |
| Rural | 146 | 696 | 681 | - | - | - | 0.87 | 0.92 | 0.94 | - | - | - | - |
| Micropolitan | 105 | 592 | 537 | - | - | - | 0.94 | 0.88 | 0.99 | - | - | - | - |
| Other Metropolitan | 105 | 667 | 720 | - | - | - | 1.02 | 0.91 | 0.93 | - | - | - | - |
| Total | 672 | 3,581 | 3,345 | - | - | - | 1.03 | 0.98 | 1.01 | - | - | - | - |

Exhibit 4e.2 – Essential Community Supports Projections – Projections (Adult Day Services - Bath (S5100-TF) Utilization By Region)

| Region | Member Months | | | | | Age Sex Factor | | | | | Monthly Projected Utilization per Member | | | | |
|------------|---------------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
| Anoka | 218 | 224 | 230 | 236 | 241 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 | - | - | - | - | - |
| Carver | 67 | 70 | 73 | 75 | 78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.79 | - | - | - | - | - |
| Dakota | 260 | 267 | 274 | 280 | 285 | 0.81 | 0.82 | 0.82 | 0.82 | 0.83 | - | - | - | - | - |
| Hennepin | 643 | 658 | 673 | 687 | 701 | 0.84 | 0.84 | 0.85 | 0.85 | 0.86 | - | - | - | - | - |
| Ramsey | 272 | 277 | 282 | 286 | 291 | 0.86 | 0.86 | 0.86 | 0.86 | 0.87 | - | - | - | - | - |
| Scott | 40 | 42 | 44 | 46 | 48 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | - | - | - | - | - |
| Sherburne | 40 | 42 | 43 | 45 | 47 | 0.88 | 0.89 | 0.89 | 0.90 | 0.91 | - | - | - | - | - |
| Washington | 122 | 126 | 130 | 134 | 137 | 0.87 | 0.87 | 0.87 | 0.87 | 0.88 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

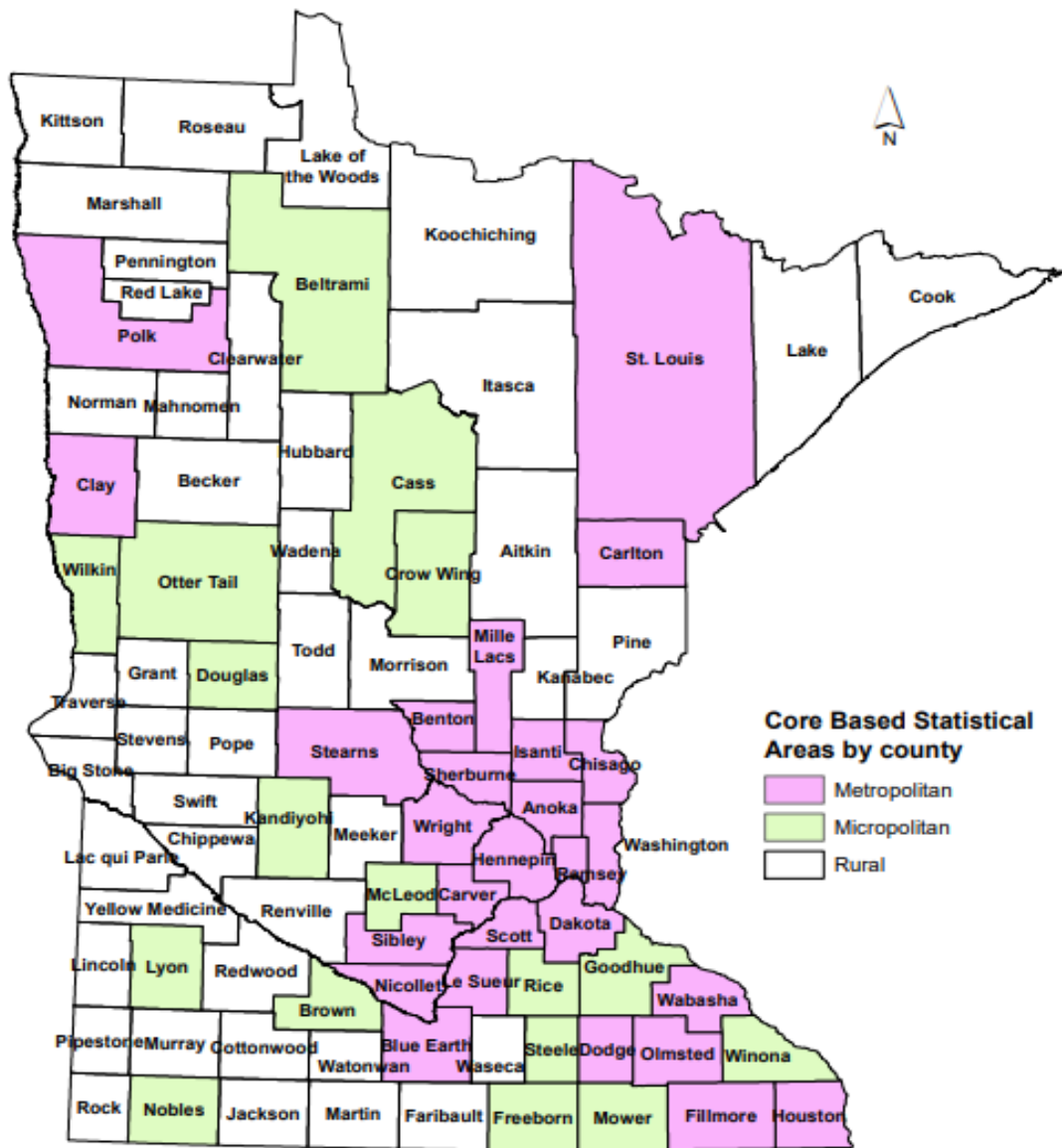
| | | | | | | | | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|---|---|---|---|---|
| Rural | 610 | 617 | 624 | 631 | 638 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 | - | - | - | - | - |
| Micropolitan | 557 | 567 | 577 | 586 | 596 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 | - | - | - | - | - |
| Other Metropolitan | 750 | 770 | 790 | 809 | 831 | 0.90 | 0.91 | 0.92 | 0.92 | 0.93 | - | - | - | - | - |
| Total | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 | 0.88 | 0.88 | 0.89 | 0.89 | 0.90 | - | - | - | - | - |

Notes:

1. SFY 2015 - SFY 2017 are actuals while SFY 2018 - 2022 are projections.
2. See Appendices A - E for historical data summaries and projection assumptions.

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
 Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
 Minnesota Department of Human Services

Appendix A - County to Region Map



Source: <https://www.census.gov/population/metro/>

As of January 2017

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County Name | Urban Status | Region |
|--------------------|---------------------|--------------------|
| Aitkin | Rural | Rural |
| Anoka | Metropolitan | Anoka |
| Becker | Rural | Rural |
| Beltrami | Micropolitan | Micropolitan |
| Benton | Metropolitan | Other Metropolitan |
| Big-Stone | Rural | Rural |
| Blue-Earth | Metropolitan | Other Metropolitan |
| Brown | Micropolitan | Micropolitan |
| Carlton | Metropolitan | Other Metropolitan |
| Carver | Metropolitan | Carver |
| Cass | Micropolitan | Micropolitan |
| Chippewa | Rural | Rural |
| Chisago | Metropolitan | Other Metropolitan |
| Clay | Metropolitan | Other Metropolitan |
| Clearwater | Rural | Rural |
| Cook | Rural | Rural |
| Cottonwood | Rural | Rural |
| Crow Wing | Micropolitan | Micropolitan |
| Dakota | Metropolitan | Dakota |
| Dodge | Metropolitan | Other Metropolitan |
| Douglas | Micropolitan | Micropolitan |
| Faribault | Rural | Rural |
| Fillmore | Metropolitan | Other Metropolitan |
| Freeborn | Micropolitan | Micropolitan |
| Goodhue | Micropolitan | Micropolitan |
| Grant | Rural | Rural |
| Hennepin | Metropolitan | Hennepin |
| Houston | Metropolitan | Other Metropolitan |
| Hubbard | Rural | Rural |
| Isanti | Metropolitan | Other Metropolitan |
| Itasca | Rural | Rural |
| Jackson | Rural | Rural |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County Name | Urban Status | Region |
|--------------------|---------------------|--------------------|
| Kanabec | Rural | Rural |
| Kandiyohi | Micropolitan | Micropolitan |
| Kittson | Rural | Rural |
| Koochiching | Rural | Rural |
| Lac qui Parle | Rural | Rural |
| Lake | Rural | Rural |
| Lake of the Woods | Rural | Rural |
| Leech Lake Tribe | Rural | Rural |
| Le Sueur | Metropolitan | Other Metropolitan |
| Lincoln | Rural | Rural |
| Lyon | Micropolitan | Micropolitan |
| McLeod | Micropolitan | Micropolitan |
| Mahnomen | Rural | Rural |
| County Name | Urban Status | Region |
| Marshall | Rural | Rural |
| Martin | Rural | Rural |
| Meeker | Rural | Rural |
| Mille-Lacs | Metropolitan | Other Metropolitan |
| Morrison | Rural | Rural |
| Mower | Micropolitan | Micropolitan |
| Murray | Rural | Rural |
| Nicollet | Metropolitan | Other Metropolitan |
| Nobles | Micropolitan | Micropolitan |
| Norman | Rural | Rural |
| Olmsted | Metropolitan | Other Metropolitan |
| OtterTail | Micropolitan | Micropolitan |
| Pennington | Rural | Rural |
| Pine | Rural | Rural |
| Pipestone | Rural | Rural |
| Polk | Metropolitan | Other Metropolitan |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County Name | Urban Status | Region |
|--------------------|---------------------|--------------------|
| Pope | Rural | Rural |
| Ramsey | Metropolitan | Ramsey |
| Red Lake | Rural | Rural |
| Redwood | Rural | Rural |
| Renville | Rural | Rural |
| Rice | Micropolitan | Micropolitan |
| Rock | Rural | Rural |
| Roseau | Rural | Rural |
| St Louis | Metropolitan | Other Metropolitan |
| Scott | Metropolitan | Scott |
| Sherburne | Metropolitan | Sherburne |
| Sibley | Metropolitan | Other Metropolitan |
| Stearns | Metropolitan | Other Metropolitan |
| Steele | Micropolitan | Micropolitan |
| Stevens | Rural | Rural |
| Swift | Rural | Rural |
| Todd | Rural | Rural |
| Traverse | Rural | Rural |
| Wabasha | Metropolitan | Other Metropolitan |
| Wadena | Rural | Rural |
| Waseca | Rural | Rural |
| Washington | Metropolitan | Washington |
| Watonwan | Rural | Rural |
| White Earth Tribe | Rural | Rural |
| Wilkin | Micropolitan | Micropolitan |
| Winona | Micropolitan | Micropolitan |
| Wright | Metropolitan | Other Metropolitan |
| Yellow Medicine | Rural | Rural |
| Out-of-State | Rural | Rural |

Appendix B-1 Summary of Historical Claim Services

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Table B-1.1 S5100 Services

| Region | EW | | | AC | | | ECS | | |
|--------------------|------------------|------------------|-------------------|----------------|----------------|----------------|--------------|---------------|---------------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | 286,994 | 296,055 | 354,000 | 29,214 | 32,681 | 35,069 | 288 | 1,558 | 1,708 |
| Carver | 45,363 | 47,663 | 69,394 | 7,245 | 11,017 | 8,915 | - | - | - |
| Dakota | 407,957 | 464,431 | 502,607 | 71,619 | 71,010 | 66,545 | 360 | 1,628 | 3,546 |
| Hennepin | 5,358,973 | 5,560,070 | 6,682,222 | 98,485 | 78,079 | 75,944 | 2,592 | 8,699 | 3,264 |
| Ramsey | 2,616,635 | 2,832,883 | 3,052,963 | 40,244 | 48,982 | 55,990 | 120 | 24 | - |
| Scott | 126,981 | 130,851 | 171,705 | 819 | 2,864 | 7,112 | 600 | 216 | - |
| Sherburne | 21,988 | 21,210 | 14,229 | 1,704 | - | 240 | - | - | - |
| Washington | 108,052 | 126,840 | 167,492 | 11,510 | 7,510 | 7,597 | - | - | - |
| Rural | 64,492 | 64,853 | 61,855 | 7,786 | 7,272 | 2,020 | - | - | - |
| Micropolitan | 97,413 | 155,260 | 162,568 | 15,337 | 13,902 | 15,061 | - | 766 | 1,752 |
| Other Metropolitan | 162,718 | 202,214 | 207,099 | 26,257 | 31,957 | 24,700 | - | - | - |
| Total | 9,297,566 | 9,902,330 | 11,446,134 | 310,220 | 305,274 | 299,193 | 3,960 | 12,891 | 10,270 |

Table B-1.2 S5102 Services

| Region | EW | | | AC | | | ECS | | |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | 421 | 134 | 12 | 70 | - | - | - | - | - |
| Carver | 53 | - | - | - | - | - | - | - | - |
| Dakota | 147 | 768 | - | - | - | - | - | - | - |
| Hennepin | 851 | 110 | 25 | 138 | - | - | - | - | - |
| Ramsey | 2,941 | 276 | - | - | - | - | - | - | - |
| Scott | - | - | - | - | - | - | - | - | - |
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | 64 | 14 | - | - | - | - | - | - | - |
| Rural | 539 | 4 | - | 573 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | |
|--------------------|---------------|--------------|-----------|--------------|----------|----------|----------|----------|----------|
| Micropolitan | 2,932 | - | - | 353 | - | - | - | - | - |
| Other Metropolitan | 2,500 | 264 | 34 | 22 | - | - | - | - | - |
| Total | 10,448 | 1,570 | 71 | 1,156 | - | - | - | - | - |

Table B-1.3 S5100-U7 Services

| Region | EW | | | AC | | | ECS | | |
|--------------------|---------------|----------------|----------------|--------------|--------------|------------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | 888 | 1,608 | 408 | 4,330 | 284 | - | - | - | - |
| Carver | - | - | - | - | - | - | - | - | - |
| Dakota | 7,608 | 8,304 | 8,400 | - | - | - | - | - | - |
| Hennepin | 54,968 | 50,352 | 65,035 | - | - | - | - | - | - |
| Ramsey | 18,216 | 25,496 | 27,354 | - | - | - | - | - | - |
| Scott | - | - | - | - | - | - | - | - | - |
| Sherburne | - | - | 2,472 | - | - | - | - | - | - |
| Washington | 2,256 | 2,776 | 4,700 | - | 1,736 | 996 | - | - | - |
| Rural | - | - | - | - | - | - | - | - | - |
| Micropolitan | 1,856 | 2,496 | 3,145 | - | - | - | - | - | - |
| Other Metropolitan | 9,711 | 13,623 | 14,506 | - | - | - | - | - | - |
| Total | 95,503 | 104,655 | 126,020 | 4,330 | 2,020 | 996 | - | - | - |

Table B-1.4 S5102-U7 Services

| Region | EW | | | AC | | | ECS | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | - | - | - | - | - | - | - | - | - |
| Carver | - | - | - | - | - | - | - | - | - |
| Dakota | - | - | - | - | - | - | - | - | - |
| Hennepin | - | - | - | - | - | - | - | - | - |
| Ramsey | - | - | - | - | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | |
|--------------------|-----|---|---|---|---|---|---|---|---|
| Scott | - | - | - | - | - | - | - | - | - |
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | - | - | - | - | - | - | - | - | - |
| Rural | - | - | - | - | - | - | - | - | - |
| Micropolitan | - | - | - | - | - | - | - | - | - |
| Other Metropolitan | 155 | - | - | - | - | - | - | - | - |
| Total | 155 | - | - | - | - | - | - | - | - |

Table B-1.5 S5102-TF Services

| Region | EW | | | AC | | | ECS | | |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | 320 | 230 | 76 | 154 | 162 | 78 | - | - | - |
| Carver | - | - | 8 | - | - | - | - | - | - |
| Dakota | 160 | 52 | 30 | 488 | 380 | 228 | - | - | - |
| Hennepin | 2,014 | 1,843 | 1,508 | 1,111 | 1,016 | 718 | - | - | - |
| Ramsey | 3,206 | 2,668 | 289 | 112 | 236 | 356 | - | - | - |
| Scott | - | - | 1,968 | - | - | - | - | - | - |
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | - | - | 110 | 276 | 128 | 60 | - | - | - |
| Rural | 1,374 | 1,598 | 1,595 | 98 | 127 | 146 | - | - | - |
| Micropolitan | 1,183 | 1,586 | 1,861 | 708 | - | 52 | - | - | - |
| Other Metropolitan | 2,142 | 1,850 | 2,440 | 307 | 240 | 20 | - | - | - |
| Total | 10,399 | 9,827 | 9,885 | 3,254 | 2,289 | 1,658 | - | - | - |

Appendix B-2 Summary of Historical Claim Payments

Table B-2.1 S5100 Services

| | EW | AC | ECS |
|--|----|----|-----|
|--|----|----|-----|

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|-----------------|-----------------|-----------------|
| Anoka | \$948,251 | \$991,470 | \$1,189,311 | \$96,614 | \$109,995 | \$117,634 | \$962 | \$5,175 | \$5,756 |
| Carver | 151,326 | 160,522 | 232,612 | 24,193 | 36,683 | 30,044 | - | - | - |
| Dakota | 1,352,192 | 1,559,053 | 1,687,957 | 237,178 | 238,653 | 223,220 | 1,202 | 5,457 | 11,856 |
| Hennepin | 17,749,549 | 18,643,839 | 22,450,644 | 328,530 | 261,335 | 255,747 | 8,577 | 29,286 | 11,000 |
| Ramsey | 8,663,156 | 9,493,492 | 10,246,510 | 134,088 | 164,854 | 188,656 | 401 | 80 | - |
| Scott | 420,806 | 440,070 | 578,504 | 2,735 | 9,652 | 23,967 | 2,004 | 728 | - |
| Sherburne | 72,285 | 71,386 | 47,867 | 5,691 | - | 809 | - | - | - |
| Washington | 358,315 | 419,167 | 556,755 | 38,443 | 25,309 | 25,602 | - | - | - |
| Rural | 204,736 | 216,008 | 206,764 | 25,690 | 24,506 | 6,807 | - | - | - |
| Micropolitan | 319,315 | 516,369 | 544,312 | 50,908 | 46,839 | 50,688 | - | 2,581 | 5,904 |
| Other Metropolitan | 518,618 | 662,329 | 680,146 | 85,429 | 107,041 | 82,885 | - | - | - |
| Total | \$30,758,549 | \$33,173,704 | \$38,421,382 | \$1,029,501 | \$1,024,867 | \$1,006,059 | \$13,146 | \$43,307 | \$34,516 |

Table B-2.2 S5102 Services

| Region | EW | | | AC | | | ECS | | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | \$18,532 | \$4,820 | \$432 | \$3,130 | \$- | \$- | \$- | \$- | \$- |
| Carver | 2,370 | - | - | - | - | - | - | - | - |
| Dakota | 6,572 | 2,289 | - | - | - | - | - | - | - |
| Hennepin | 27,093 | 3,244 | 899 | 6,170 | - | - | - | - | - |
| Ramsey | 103,437 | 9,934 | - | - | - | - | - | - | - |
| Scott | - | - | - | - | - | - | - | - | - |
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | 2,640 | 504 | - | - | - | - | - | - | - |
| Rural | 23,960 | 144 | - | 25,529 | - | - | - | - | - |
| Micropolitan | 118,020 | - | - | 15,105 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | |
|--------------------|------------------|-----------------|----------------|-----------------|------------|------------|------------|------------|------------|
| Other Metropolitan | 108,964 | 9,496 | 1,223 | 984 | - | - | - | - | - |
| Total | \$411,588 | \$30,431 | \$2,554 | \$50,918 | \$- | \$- | \$- | \$- | \$- |

Table B-2.3 S5100-U7 Services

| Region | EW | | | AC | | | ECS | | |
|--------------------|------------------|------------------|------------------|-----------------|----------------|----------------|------------|------------|------------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | \$2,871 | \$5,382 | \$1,375 | \$14,462 | \$957 | \$- | \$- | \$- | \$- |
| Carver | - | - | - | - | - | - | - | - | - |
| Dakota | 25,411 | 27,928 | 28,307 | - | - | - | - | - | - |
| Hennepin | 183,410 | 169,364 | 219,146 | - | - | - | - | - | - |
| Ramsey | 60,764 | 85,716 | 92,088 | - | - | - | - | - | - |
| Scott | - | - | - | - | - | - | - | - | - |
| Sherburne | - | - | 8,331 | - | - | - | - | - | - |
| Washington | 7,403 | 9,337 | 15,824 | - | 5,850 | 3,357 | - | - | - |
| Rural | - | - | - | - | - | - | - | - | - |
| Micropolitan | 6,199 | 7,087 | 10,454 | - | - | - | - | - | - |
| Other Metropolitan | 32,309 | 45,566 | 48,747 | - | - | - | - | - | - |
| Total | \$318,367 | \$350,378 | \$424,272 | \$14,462 | \$6,807 | \$3,357 | \$- | \$- | \$- |

Table B-2.4 S5102-U7 Services

| Region | EW | | | AC | | | ECS | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | \$- | \$- | \$- | \$- | \$- | \$- | \$- | \$- | \$- |
| Carver | - | - | - | - | - | - | - | - | - |
| Dakota | - | - | - | - | - | - | - | - | - |
| Hennepin | - | - | - | - | - | - | - | - | - |
| Ramsey | - | - | - | - | - | - | - | - | - |
| Scott | - | - | - | - | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | |
|--------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | - | - | - | - | - | - | - | - | - |
| Rural | - | - | - | - | - | - | - | - | - |
| Micropolitan | - | - | - | - | - | - | - | - | - |
| Other Metropolitan | 5,578 | - | - | - | - | - | - | - | - |
| Total | \$5,578 | \$- | \$- | \$- | \$- | \$- | \$- | \$- | \$- |

Table B-2.5 S5102-TF Services

| Region | EW | | | AC | | | ECS | | |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|------------|------------|
| | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2015 | SFY 2016 | SFY 2017 |
| Anoka | \$2,386 | \$1,720 | \$567 | \$1,137 | \$1,223 | \$589 | \$- | \$- | \$- |
| Carver | - | - | 60 | - | - | - | - | - | - |
| Dakota | 1,188 | 387 | 215 | 3,645 | 2,861 | 1,721 | - | - | - |
| Hennepin | 14,597 | 13,755 | 10,136 | 8,285 | 7,666 | 5,421 | - | - | - |
| Ramsey | 11,611 | 10,024 | 2,155 | 831 | 1,782 | 2,688 | - | - | - |
| Scott | - | - | 6,632 | - | - | - | - | - | - |
| Sherburne | - | - | - | - | - | - | - | - | - |
| Washington | - | - | 793 | 2,049 | 965 | 408 | - | - | - |
| Rural | 10,091 | 11,810 | 11,782 | 733 | 959 | 1,102 | - | - | - |
| Micropolitan | 8,719 | 11,893 | 13,965 | 5,296 | - | 393 | - | - | - |
| Other Metropolitan | 15,561 | 13,527 | 18,317 | 2,253 | 1,812 | 151 | - | - | - |
| Total | \$64,154 | \$63,116 | \$64,623 | \$24,229 | \$17,268 | \$12,473 | \$- | \$- | \$- |

Appendix B-3 Summary of Historical Claim Services by County (SFY 2015 - SFY 2017 for All Programs Total Units)

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|--------|--------|---------------|-----------|-------|----------|----------|-------|
| Aitkin | Rural | 4,224 | 148 | 31 | - | - | - |
| Anoka | Anoka | 40,432 | 1,037,567 | 637 | 7,518 | - | 1,020 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|------------|--------------------|---------------|-----------|-------|----------|----------|-------|
| Becker | Rural | 7,350 | 17,876 | 84 | - | - | 489 |
| Beltrami | Micropolitan | 10,099 | 66,236 | - | 2,090 | - | 1,277 |
| Benton | Other Metropolitan | 6,183 | 42,585 | 38 | 6,188 | - | 1,430 |
| Big-Stone | Rural | 2,365 | - | - | - | - | - |
| Blue-Earth | Other Metropolitan | 9,651 | 9,269 | - | - | - | 214 |
| Brown | Micropolitan | 4,067 | 49,155 | 20 | - | - | 2,637 |
| Carlton | Other Metropolitan | 10,187 | 12,876 | - | 96 | - | 447 |
| Carver | Carver | 9,435 | 189,597 | 53 | - | - | 8 |
| Cass | Micropolitan | 5,310 | 14,118 | - | 1,202 | - | - |
| Chippewa | Rural | 2,791 | - | - | - | - | - |
| Chisago | Other Metropolitan | 6,523 | 19,484 | 109 | - | - | - |
| Clay | Other Metropolitan | 11,139 | 2,839 | - | - | - | - |
| Clearwater | Rural | 2,168 | 2,685 | - | - | - | - |
| Cook | Rural | 655 | - | - | - | - | - |
| Cottonwood | Rural | 2,518 | - | - | - | - | - |
| Crow Wing | Micropolitan | 13,502 | 65,813 | 155 | 2,005 | - | 738 |
| Dakota | Dakota | 54,463 | 1,589,703 | 915 | 24,312 | - | 1,338 |
| Dodge | Other Metropolitan | 832 | 10,223 | - | - | - | - |
| Douglas | Micropolitan | 7,489 | 12,502 | 508 | - | - | - |
| Faribault | Rural | 2,530 | 596 | - | - | - | 62 |
| Fillmore | Other Metropolitan | 5,366 | - | - | - | - | - |
| Freeborn | Micropolitan | 5,521 | 128 | - | - | - | - |
| Goodhue | Micropolitan | 7,141 | 18,056 | 54 | - | - | - |
| Grant | Rural | 1,473 | 8 | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|-------------------|--------------------|---------------|------------|-------|----------|----------|-------|
| Hennepin | Hennepin | 245,910 | 17,868,328 | 1,124 | 170,355 | - | 8,210 |
| Houston | Other Metropolitan | 2,696 | 2,940 | - | - | - | 170 |
| Hubbard | Rural | 4,696 | 513 | - | - | - | - |
| Isanti | Other Metropolitan | 4,976 | 29,231 | - | - | - | 276 |
| Itasca | Rural | 13,515 | 62,136 | 43 | - | - | - |
| Jackson | Rural | 1,418 | - | - | - | - | - |
| Kanabec | Rural | 3,188 | 1,248 | - | - | - | - |
| Kandiyohi | Micropolitan | 5,484 | 103,532 | 542 | - | - | 62 |
| Kittson | Rural | 1,106 | - | - | - | - | - |
| Koochiching | Rural | 1,732 | - | - | - | - | - |
| Lac Qui Parle | Rural | 1,915 | - | 60 | - | - | - |
| Lake | Rural | 2,859 | - | - | - | - | - |
| Lake Of The Woods | Rural | 623 | 378 | 6 | - | - | - |
| Le Sueur | Other Metropolitan | 4,775 | 16,386 | 390 | - | - | - |
| Leech Lake Tribe | Rural | 94 | - | - | - | - | - |
| Lincoln | Rural | 1,357 | - | - | - | - | - |
| Lyon | Micropolitan | 5,043 | 2,892 | 41 | - | - | 114 |
| Mahnomen | Rural | 1,345 | - | - | - | - | - |
| Marshall | Rural | 2,448 | - | - | - | - | - |
| Martin | Rural | 4,700 | 3,560 | - | - | - | - |
| Mcleod | Micropolitan | 6,115 | 10,515 | 2 | - | - | 59 |
| Meeker | Rural | 5,756 | 58,603 | - | - | - | 2,497 |
| Mille-Lacs | Other Metropolitan | 4,597 | 27,686 | - | - | - | - |
| Morrison | Rural | 7,940 | 13,902 | 311 | - | - | 891 |
| Mower | Micropolitan | 13,401 | 91,292 | 1,782 | 2,200 | - | 60 |
| Murray | Rural | 1,946 | 9,712 | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|------------|--------------------|---------------|-----------|-------|----------|----------|-------|
| Nicollet | Other Metropolitan | 5,278 | 25,649 | 483 | - | - | 903 |
| Nobles | Micropolitan | 2,898 | 4,851 | 11 | - | - | 4 |
| Norman | Rural | 1,425 | - | - | - | - | 18 |
| Olmsted | Other Metropolitan | 19,419 | 68,211 | 487 | 8,300 | 93 | 1,272 |
| Ottertail | Micropolitan | 12,362 | 8,646 | - | - | - | 184 |
| Pennington | Rural | 3,063 | - | - | - | - | - |
| Pine | Rural | 8,030 | 1,200 | - | - | - | - |
| Pipestone | Rural | 1,673 | - | - | - | - | - |
| Polk | Other Metropolitan | 10,069 | 33,976 | 331 | - | 61 | 990 |
| Pope | Rural | 2,999 | 12,175 | - | - | - | - |
| Ramsey | Ramsey | 127,096 | 8,647,841 | 3,217 | 71,066 | - | 6,867 |
| Red Lake | Rural | 1,297 | 562 | - | - | - | - |
| Redwood | Rural | 2,004 | 18 | - | - | - | 2 |
| Renville | Rural | 1,775 | 2,078 | 493 | - | - | - |
| Rice | Micropolitan | 11,571 | 2,845 | 9 | - | - | - |
| Rock | Rural | 1,575 | - | - | - | - | - |
| Roseau | Rural | 2,985 | 144 | - | - | - | - |
| Scott | Scott | 12,476 | 441,148 | - | - | - | 1,968 |
| Sherburne | Sherburne | 8,935 | 59,371 | - | 2,472 | - | - |
| Sibley | Other Metropolitan | 3,669 | 7,322 | 22 | - | - | 24 |
| St Louis | Other Metropolitan | 52,140 | 128,325 | 277 | 11,090 | 1 | 1,030 |
| Stearns | Other Metropolitan | 20,440 | 127,421 | 522 | 9,252 | - | 243 |
| Steele | Micropolitan | 12,398 | 1,288 | - | - | - | - |
| Stevens | Rural | 1,765 | - | - | - | - | - |
| Swift | Rural | 3,289 | 13,710 | 13 | - | - | 815 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|-------------------|--------------------|----------------|-------------------|---------------|----------------|------------|---------------|
| Todd | Rural | 6,629 | 4,638 | - | - | - | - |
| Traverse | Rural | 865 | - | - | - | - | - |
| Wabasha | Other Metropolitan | 2,872 | - | - | - | - | - |
| Wadena | Rural | 4,349 | 1,906 | 75 | - | - | 164 |
| Waseca | Rural | 1,047 | - | - | - | - | - |
| Washington | Washington | 22,125 | 429,001 | 78 | 12,464 | - | 574 |
| Watonwan | Rural | 2,093 | 386 | - | - | - | - |
| White Earth Tribe | Rural | 3,373 | 96 | - | - | - | - |
| Wilkin | Micropolitan | 1,517 | - | - | - | - | - |
| Winona | Micropolitan | 9,295 | 10,190 | 161 | - | - | 255 |
| Wright | Other Metropolitan | 14,595 | 90,522 | 161 | 2,914 | - | - |
| Yellow Medicine | Rural | 2,619 | - | - | - | - | - |
| Total | | 985,059 | 31,587,838 | 13,245 | 333,524 | 155 | 37,312 |

Appendix B-4 Summary of Historical Claim Payments by County (SFY 2015 - SFY 2017 for All Programs Total Payments)

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|------------|--------------------|---------------|-----------|---------|----------|----------|--------|
| Aitkin | Rural | 4,224 | \$499 | \$1,386 | \$- | \$- | \$- |
| Anoka | Anoka | 40,432 | 3,465,167 | 26,913 | 25,047 | - | 7,621 |
| Becker | Rural | 7,350 | 60,125 | 3,756 | - | - | 3,692 |
| Beltrami | Micropolitan | 10,099 | 216,352 | - | 6,872 | - | 9,540 |
| Benton | Other Metropolitan | 6,183 | 142,068 | 1,693 | 20,854 | - | 10,756 |
| Big-Stone | Rural | 2,365 | - | - | - | - | - |
| Blue-Earth | Other Metropolitan | 9,651 | 31,214 | - | - | - | 1,616 |
| Brown | Micropolitan | 4,067 | 164,222 | 894 | - | - | 19,666 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|------------|--------------------|---------------|------------|--------|----------|----------|--------|
| Carlton | Other Metropolitan | 10,187 | 42,418 | - | 324 | - | 3,131 |
| Carver | Carver | 9,435 | 635,380 | 2,370 | - | - | 60 |
| Cass | Micropolitan | 5,310 | 46,040 | - | 4,024 | - | - |
| Chippewa | Rural | 2,791 | - | - | - | - | - |
| Chisago | Other Metropolitan | 6,523 | 62,058 | 4,629 | - | - | - |
| Clay | Other Metropolitan | 11,139 | 9,505 | - | - | - | - |
| Clearwater | Rural | 2,168 | 8,966 | - | - | - | - |
| Cook | Rural | 655 | - | - | - | - | - |
| Cottonwood | Rural | 2,518 | - | - | - | - | - |
| Crow Wing | Micropolitan | 13,502 | 219,482 | 6,914 | 5,429 | - | 5,555 |
| Dakota | Dakota | 54,463 | 5,316,769 | 8,862 | 81,645 | - | 10,019 |
| Dodge | Other Metropolitan | 832 | 34,349 | - | - | - | - |
| Douglas | Micropolitan | 7,489 | 42,066 | 22,464 | - | - | - |
| Faribault | Rural | 2,530 | 2,008 | - | - | - | 217 |
| Fillmore | Other Metropolitan | 5,366 | - | - | - | - | - |
| Freeborn | Micropolitan | 5,521 | 428 | - | - | - | - |
| Goodhue | Micropolitan | 7,141 | 60,628 | 2,395 | - | - | - |
| Grant | Rural | 1,473 | 27 | - | - | - | - |
| Hennepin | Hennepin | 245,910 | 59,738,507 | 37,406 | 571,921 | - | 59,859 |
| Houston | Other Metropolitan | 2,696 | 9,682 | - | - | - | 1,240 |
| Hubbard | Rural | 4,696 | 1,718 | - | - | - | - |
| Isanti | Other Metropolitan | 4,976 | 96,313 | - | - | - | 2,070 |
| Itasca | Rural | 13,515 | 204,377 | 1,932 | - | - | - |
| Jackson | Rural | 1,418 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|-------------------|--------------------|---------------|---------|--------|----------|----------|--------|
| Kanabec | Rural | 3,188 | 4,170 | - | - | - | - |
| Kandiyohi | Micropolitan | 5,484 | 345,704 | 24,233 | - | - | 465 |
| Kittson | Rural | 1,106 | - | - | - | - | - |
| Koochiching | Rural | 1,732 | - | - | - | - | - |
| Lac Qui Parle | Rural | 1,915 | - | 2,683 | - | - | - |
| Lake | Rural | 2,859 | - | - | - | - | - |
| Lake Of The Woods | Rural | 623 | 1,236 | 268 | - | - | - |
| Le Sueur | Other Metropolitan | 4,775 | 42,972 | 17,437 | - | - | - |
| Leech Lake Tribe | Rural | 94 | - | - | - | - | - |
| Lincoln | Rural | 1,357 | - | - | - | - | - |
| Lyon | Micropolitan | 5,043 | 9,560 | 1,833 | - | - | 853 |
| Mahnomen | Rural | 1,345 | - | - | - | - | - |
| Marshall | Rural | 2,448 | - | - | - | - | - |
| Martin | Rural | 4,700 | 11,997 | - | - | - | - |
| McLeod | Micropolitan | 6,115 | 34,985 | 85 | - | - | 441 |
| Meeker | Rural | 5,756 | 193,981 | - | - | - | 18,806 |
| Mille-Lacs | Other Metropolitan | 4,597 | 92,458 | - | - | - | - |
| Morrison | Rural | 7,940 | 46,561 | 13,816 | - | - | 6,682 |
| Mower | Micropolitan | 13,401 | 304,501 | 66,307 | 7,414 | - | 450 |
| Murray | Rural | 1,946 | 29,729 | - | - | - | - |
| Nicollet | Other Metropolitan | 5,278 | 86,136 | 21,595 | - | - | 6,797 |
| Nobles | Micropolitan | 2,898 | 16,196 | 492 | - | - | 30 |
| Norman | Rural | 1,425 | - | - | - | - | 135 |
| Olmsted | Other Metropolitan | 19,419 | 229,001 | 20,439 | 27,717 | 3,477 | 9,369 |
| Ottertail | Micropolitan | 12,362 | 29,028 | - | - | - | 1,380 |
| Pennington | Rural | 3,063 | - | - | - | - | - |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|------------|--------------------|---------------|------------|---------|----------|----------|--------|
| Pine | Rural | 8,030 | 4,006 | - | - | - | - |
| Pipestone | Rural | 1,673 | - | - | - | - | - |
| Polk | Other Metropolitan | 10,069 | 105,529 | 13,249 | - | 2,057 | 7,063 |
| Pope | Rural | 2,999 | 40,848 | - | - | - | - |
| Ramsey | Ramsey | 127,096 | 28,891,237 | 113,371 | 238,568 | - | 29,091 |
| Red Lake | Rural | 1,297 | 1,894 | - | - | - | - |
| Redwood | Rural | 2,004 | 61 | - | - | - | 15 |
| Renville | Rural | 1,775 | 7,003 | 21,895 | - | - | - |
| Rice | Micropolitan | 11,571 | 9,457 | 383 | - | - | - |
| Rock | Rural | 1,575 | - | - | - | - | - |
| Roseau | Rural | 2,985 | 481 | - | - | - | - |
| Scott | Scott | 12,476 | 1,478,467 | - | - | - | 6,632 |
| Sherburne | Sherburne | 8,935 | 198,039 | - | 8,331 | - | - |
| Sibley | Other Metropolitan | 3,669 | 24,008 | 984 | - | - | 180 |
| St Louis | Other Metropolitan | 52,140 | 421,018 | 11,403 | 37,213 | 45 | 7,607 |
| Stearns | Other Metropolitan | 20,440 | 405,166 | 22,047 | 30,697 | - | 1,793 |
| Steele | Micropolitan | 12,398 | 4,215 | - | - | - | - |
| Stevens | Rural | 1,765 | - | - | - | - | - |
| Swift | Rural | 3,289 | 45,211 | 544 | - | - | 5,803 |
| Todd | Rural | 6,629 | 12,830 | - | - | - | - |
| Traverse | Rural | 865 | - | - | - | - | - |
| Wabasha | Other Metropolitan | 2,872 | - | - | - | - | - |
| Wadena | Rural | 4,349 | 5,226 | 3,353 | - | - | 1,127 |
| Waseca | Rural | 1,047 | - | - | - | - | - |
| Washington | Washington | 22,125 | 1,423,590 | 3,143 | 41,770 | - | 4,214 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| County | Region | Member Months | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102 |
|-------------------|--------------------|---------------|---------------|-----------|-------------|----------|-----------|
| Watonwan | Rural | 2,093 | 1,289 | - | - | - | - |
| White Earth Tribe | Rural | 3,373 | 268 | - | - | - | - |
| Wilkin | Micropolitan | 1,517 | - | - | - | - | - |
| Winona | Micropolitan | 9,295 | 34,052 | 7,125 | - | - | 1,887 |
| Wright | Other Metropolitan | 14,595 | 302,550 | 7,193 | 9,818 | - | - |
| Yellow Medicine | Rural | 2,619 | - | - | - | - | - |
| Total | | 985,059 | \$105,505,030 | \$495,491 | \$1,117,643 | \$5,578 | \$245,862 |

Appendix C Age Sex Category Adjustments Factors (By Age, Sex, Service, and Program)

| | EW | | | | | AC | | | | | ECS | | | | |
|-------------------------------|-------|-------|----------|----------|----------|-------|-------|----------|----------|----------|-------|-------|----------|----------|----------|
| | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102-TF | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102-TF | S5100 | S5102 | S5100-U7 | S5102-U7 | S5102-TF |
| Females 65 and younger | 0.74 | 0.74 | 0.74 | 0.74 | 0.22 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 0.69 | 0.69 | 0.69 | 0.69 | 0.22 |
| Female Age 66 - 70 | 1.15 | 1.15 | 1.15 | 1.15 | 0.43 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 1.08 | 1.08 | 1.08 | 1.08 | 0.42 |
| Female Age 71 - 75 | 1.33 | 1.33 | 1.33 | 1.33 | 0.99 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 1.26 | 1.26 | 1.26 | 1.26 | 0.98 |
| Female Age 76 - 80 | 1.22 | 1.22 | 1.22 | 1.22 | 1.46 | 1.66 | 1.66 | 1.66 | 1.66 | 1.66 | 1.15 | 1.15 | 1.15 | 1.15 | 1.45 |
| Female Age 81 - 85 | 0.72 | 0.72 | 0.72 | 0.72 | 1.31 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 0.68 | 0.68 | 0.68 | 0.68 | 1.30 |
| Female Age 86 - 90 | 0.39 | 0.39 | 0.39 | 0.39 | 0.63 | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 | 0.37 | 0.37 | 0.37 | 0.37 | 0.63 |
| Female Age 91 - 100 | 0.23 | 0.23 | 0.23 | 0.23 | 0.28 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.21 | 0.21 | 0.21 | 0.21 | 0.27 |
| Females 101 and older | 0.05 | 0.05 | 0.05 | 0.05 | 0.28 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 0.05 | 0.05 | 0.05 | 0.05 | 0.27 |
| Males 65 and younger | 0.63 | 0.63 | 0.63 | 0.63 | 0.85 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.60 | 0.60 | 0.60 | 0.60 | 0.84 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | | | | | | | | |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Male Age 66 - 70 | 1.24 | 1.24 | 1.24 | 1.24 | 0.85 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 1.16 | 1.16 | 1.16 | 1.16 | 0.84 |
| Male Age 71 - 75 | 1.53 | 1.53 | 1.53 | 1.53 | 1.72 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.44 | 1.44 | 1.44 | 1.44 | 1.71 |
| Male Age 76 - 80 | 1.59 | 1.59 | 1.59 | 1.59 | 2.22 | 1.07 | 1.07 | 1.07 | 1.07 | 1.07 | 1.50 | 1.50 | 1.50 | 1.50 | 2.21 |
| Male Age 81 - 85 | 1.47 | 1.47 | 1.47 | 1.47 | 1.30 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.39 | 1.39 | 1.39 | 1.39 | 1.29 |
| Male Age 86 - 90 | 1.08 | 1.08 | 1.08 | 1.08 | 0.55 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 1.01 | 1.01 | 1.01 | 1.01 | 0.54 |
| Male Age 91 - 100 | 0.95 | 0.95 | 0.95 | 0.95 | 0.01 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.89 | 0.89 | 0.89 | 0.89 | 0.01 |
| Males 101 and older | 0.95 | 0.95 | 0.95 | 0.95 | 0.01 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.89 | 0.89 | 0.89 | 0.89 | 0.01 |

Appendix D Membership & Age-Sex Projections (By Program and Service Type)

Table D-1 Membership Projections (EW Enrollment (Members Months))

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Anoka | 10,417 | 10,622 | 11,831 | 12,015 | 12,568 | 13,111 | 13,583 | 14,013 |
| Carver | 2,430 | 2,574 | 2,634 | 2,803 | 2,936 | 3,063 | 3,170 | 3,268 |
| Dakota | 13,802 | 13,823 | 14,537 | 15,086 | 15,636 | 16,164 | 16,604 | 17,011 |
| Hennepin | 73,473 | 75,703 | 81,232 | 81,463 | 83,967 | 86,417 | 88,701 | 91,045 |
| Ramsey | 36,615 | 37,943 | 40,738 | 40,535 | 41,658 | 42,773 | 43,760 | 44,640 |
| Scott | 3,482 | 3,660 | 4,021 | 4,170 | 4,405 | 4,634 | 4,827 | 4,990 |
| Sherburne | 2,448 | 2,526 | 2,501 | 2,753 | 2,889 | 3,019 | 3,157 | 3,319 |
| Washington | 5,754 | 5,818 | 6,419 | 6,560 | 6,851 | 7,136 | 7,374 | 7,560 |
| Rural | 40,966 | 39,299 | 39,399 | 41,222 | 41,893 | 42,509 | 43,263 | 44,185 |
| Micropolitan | 39,988 | 40,524 | 40,481 | 42,151 | 43,059 | 43,914 | 44,895 | 45,990 |
| Other Metropolitan | 58,776 | 57,553 | 58,954 | 62,323 | 64,283 | 66,161 | 68,230 | 70,474 |
| Total | 288,151 | 290,045 | 302,747 | 311,081 | 320,146 | 328,900 | 337,565 | 346,495 |

Table D-2 S5100 Age Sex Adjustments (EW Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Anoka | 1.04 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 |
| Carver | 0.91 | 0.92 | 0.93 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

| | | | | | | | | |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Dakota | 0.99 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 |
| Hennepin | 1.09 | 1.08 | 1.08 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 |
| Ramsey | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 |
| Scott | 0.99 | 0.97 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 0.92 | 0.93 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 |
| Washington | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 |
| Rural | 0.94 | 0.94 | 0.93 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Micropolitan | 0.92 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 |
| Other Metropolitan | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Total | 1.00 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 |

Table D-3 S5102 Age Sex Adjustments (EW Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 1.04 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 |
| Carver | 0.91 | 0.92 | 0.93 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 |
| Dakota | 0.99 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 |
| Hennepin | 1.09 | 1.08 | 1.08 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 |
| Ramsey | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 |
| Scott | 0.99 | 0.97 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 0.92 | 0.93 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 |
| Washington | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 |
| Rural | 0.94 | 0.94 | 0.93 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Micropolitan | 0.92 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 |
| Other Metropolitan | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Total | 1.00 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 |

Table D-4 S5100-U7 Age Sex Adjustments (EW Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.04 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 |
| Carver | 0.91 | 0.92 | 0.93 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 |
| Dakota | 0.99 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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| | | | | | | | | |
|---------------------------|------|------|------|------|------|------|------|------|
| Hennepin | 1.09 | 1.08 | 1.08 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 |
| Ramsey | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 |
| Scott | 0.99 | 0.97 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 0.92 | 0.93 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 |
| Washington | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 |
| Rural | 0.94 | 0.94 | 0.93 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Micropolitan | 0.92 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 |
| Other Metropolitan | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Total | 1.00 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 |

Table D-5 S5102-U7 Age Sex Adjustments (EW Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Anoka | 1.04 | 1.04 | 1.04 | 1.03 | 1.02 | 1.02 | 1.02 | 1.03 |
| Carver | 0.91 | 0.92 | 0.93 | 0.91 | 0.91 | 0.91 | 0.92 | 0.93 |
| Dakota | 0.99 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 | 1.00 |
| Hennepin | 1.09 | 1.08 | 1.08 | 1.08 | 1.09 | 1.09 | 1.09 | 1.10 |
| Ramsey | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.08 | 1.09 | 1.10 |
| Scott | 0.99 | 0.97 | 0.98 | 0.97 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 0.92 | 0.93 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 |
| Washington | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.95 |
| Rural | 0.94 | 0.94 | 0.93 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Micropolitan | 0.92 | 0.92 | 0.93 | 0.94 | 0.95 | 0.96 | 0.96 | 0.97 |
| Other Metropolitan | 0.93 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 | 0.98 | 0.99 |
| Total | 1.00 | 1.00 | 1.00 | 1.01 | 1.01 | 1.02 | 1.02 | 1.03 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Table D-6 S5100-TF Age Sex Adjustments (EW Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.04 | 1.04 | 1.04 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 0.92 | 0.94 | 0.96 | 0.91 | 0.91 | 0.90 | 0.90 | 0.91 |
| Dakota | 1.02 | 1.03 | 1.02 | 1.00 | 1.00 | 0.99 | 0.99 | 1.00 |
| Hennepin | 1.06 | 1.06 | 1.05 | 1.04 | 1.04 | 1.03 | 1.03 | 1.05 |
| Ramsey | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.03 | 1.03 | 1.04 |
| Scott | 1.04 | 1.01 | 1.00 | 0.99 | 0.99 | 0.98 | 0.98 | 0.99 |
| Sherburne | 0.99 | 0.97 | 0.98 | 0.99 | 0.99 | 1.00 | 1.01 | 1.02 |
| Washington | 0.97 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.95 |
| Rural | 0.96 | 0.96 | 0.96 | 0.97 | 0.98 | 0.99 | 1.00 | 1.01 |
| Micropolitan | 0.95 | 0.94 | 0.95 | 0.96 | 0.97 | 0.97 | 0.98 | 0.99 |
| Other Metropolitan | 0.95 | 0.95 | 0.95 | 0.95 | 0.96 | 0.97 | 0.97 | 0.98 |
| Total | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 1.00 | 1.01 |

Table D-7 Membership Projections (AC Enrollment (Members Months))

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 2,327 | 2,339 | 2,381 | 2,537 | 2,658 | 2,775 | 2,867 | 2,954 |
| Carver | 567 | 548 | 503 | 558 | 581 | 604 | 626 | 655 |
| Dakota | 3,757 | 3,790 | 4,157 | 4,189 | 4,338 | 4,484 | 4,608 | 4,740 |
| Hennepin | 4,911 | 4,709 | 4,598 | 4,869 | 5,012 | 5,148 | 5,253 | 5,336 |
| Ramsey | 3,859 | 3,583 | 3,868 | 3,859 | 3,954 | 4,044 | 4,110 | 4,178 |
| Scott | 339 | 391 | 549 | 511 | 539 | 566 | 591 | 615 |
| Sherburne | 475 | 464 | 452 | 493 | 517 | 539 | 565 | 595 |
| Washington | 1,282 | 1,340 | 1,331 | 1,429 | 1,493 | 1,554 | 1,604 | 1,647 |
| Rural | 5,198 | 4,737 | 4,445 | 4,690 | 4,755 | 4,814 | 4,897 | 5,010 |
| Micropolitan | 3,942 | 3,684 | 3,360 | 3,636 | 3,713 | 3,784 | 3,858 | 3,960 |
| Other Metropolitan | 6,764 | 6,068 | 5,800 | 6,204 | 6,385 | 6,556 | 6,746 | 6,972 |
| Total | 33,421 | 31,653 | 31,444 | 32,975 | 33,945 | 34,868 | 35,724 | 36,661 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
Minnesota Department of Human Services

Table D-8 S5100 Age Sex Adjustments (AC Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 1.03 | 1.06 | 1.08 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 |
| Dakota | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 |
| Hennepin | 1.00 | 1.00 | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Ramsey | 1.01 | 1.03 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 |
| Scott | 0.85 | 0.85 | 0.92 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| Sherburne | 0.95 | 0.96 | 0.90 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Washington | 0.99 | 0.96 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Rural | 1.01 | 1.03 | 0.98 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 |
| Micropolitan | 1.01 | 1.03 | 0.99 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Other Metropolitan | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Total | 1.00 | 1.01 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Table D-9 S5102 Age Sex Adjustments (AC Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 1.03 | 1.06 | 1.08 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 |
| Dakota | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 |
| Hennepin | 1.00 | 1.00 | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Ramsey | 1.01 | 1.03 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 |
| Scott | 0.85 | 0.85 | 0.92 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| Sherburne | 0.95 | 0.96 | 0.90 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Washington | 0.99 | 0.96 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Rural | 1.01 | 1.03 | 0.98 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 |
| Micropolitan | 1.01 | 1.03 | 0.99 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Other Metropolitan | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Total | 1.00 | 1.01 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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Table D-10 S5100-U7 Age Sex Adjustments (AC Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 1.03 | 1.06 | 1.08 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 |
| Dakota | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 |
| Hennepin | 1.00 | 1.00 | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Ramsey | 1.01 | 1.03 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 |
| Scott | 0.85 | 0.85 | 0.92 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| Sherburne | 0.95 | 0.96 | 0.90 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Washington | 0.99 | 0.96 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Rural | 1.01 | 1.03 | 0.98 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 |
| Micropolitan | 1.01 | 1.03 | 0.99 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Other Metropolitan | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Total | 1.00 | 1.01 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Table D-11 S5102-U7 Age Sex Adjustments (AC Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 1.03 | 1.06 | 1.08 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 |
| Dakota | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 |
| Hennepin | 1.00 | 1.00 | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Ramsey | 1.01 | 1.03 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 |
| Scott | 0.85 | 0.85 | 0.92 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| Sherburne | 0.95 | 0.96 | 0.90 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Washington | 0.99 | 0.96 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Rural | 1.01 | 1.03 | 0.98 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 |
| Micropolitan | 1.01 | 1.03 | 0.99 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Other Metropolitan | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Total | 1.00 | 1.01 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Appendix C: Adult Day Projections, SFY 2018 – SFY 2022
Evaluation of Rate Methodologies for Elderly Waiver and Related Programs
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Table D-12 S5100-TF Age Sex Adjustments (AC Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.02 | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Carver | 1.03 | 1.06 | 1.08 | 1.06 | 1.06 | 1.06 | 1.05 | 1.05 |
| Dakota | 1.02 | 1.02 | 1.01 | 1.01 | 1.01 | 1.01 | 1.00 | 1.01 |
| Hennepin | 1.00 | 1.00 | 0.96 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Ramsey | 1.01 | 1.03 | 1.01 | 1.01 | 1.01 | 1.00 | 1.00 | 1.01 |
| Scott | 0.85 | 0.85 | 0.92 | 0.89 | 0.88 | 0.88 | 0.88 | 0.88 |
| Sherburne | 0.95 | 0.96 | 0.90 | 0.93 | 0.93 | 0.94 | 0.94 | 0.94 |
| Washington | 0.99 | 0.96 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Rural | 1.01 | 1.03 | 0.98 | 1.01 | 1.01 | 1.01 | 1.02 | 1.02 |
| Micropolitan | 1.01 | 1.03 | 0.99 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Other Metropolitan | 0.98 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Total | 1.00 | 1.01 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Table D-13 Membership Projections (ECS Enrollment (Members Months))

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 41 | 259 | 215 | 218 | 224 | 230 | 236 | 241 |
| Carver | 17 | 84 | 78 | 67 | 70 | 73 | 75 | 78 |
| Dakota | 42 | 242 | 313 | 260 | 267 | 274 | 280 | 285 |
| Hennepin | 153 | 675 | 456 | 643 | 658 | 673 | 687 | 701 |
| Ramsey | 49 | 260 | 181 | 272 | 277 | 282 | 286 | 291 |
| Scott | 8 | 14 | 12 | 40 | 42 | 44 | 46 | 48 |
| Sherburne | 3 | 22 | 44 | 40 | 42 | 43 | 45 | 47 |
| Washington | 3 | 70 | 108 | 122 | 126 | 130 | 134 | 137 |
| Rural | 146 | 696 | 681 | 610 | 617 | 624 | 631 | 638 |
| Micropolitan | 105 | 592 | 537 | 557 | 567 | 577 | 586 | 596 |
| Other Metropolitan | 105 | 667 | 720 | 750 | 770 | 790 | 809 | 831 |
| Total | 672 | 3,581 | 3,345 | 3,580 | 3,660 | 3,740 | 3,815 | 3,893 |

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Table D-14 S5100 Age Sex Adjustments (ECS Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.16 | 1.11 | 1.16 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Carver | 0.63 | 0.68 | 0.80 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 |
| Dakota | 1.14 | 1.14 | 1.05 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Hennepin | 1.11 | 1.10 | 1.11 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 |
| Ramsey | 1.13 | 0.99 | 0.88 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 |
| Scott | 1.31 | 1.23 | 1.26 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 1.50 | 1.16 | 1.19 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 |
| Washington | 1.26 | 1.04 | 1.09 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 |
| Rural | 0.88 | 0.96 | 0.97 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Micropolitan | 0.98 | 0.91 | 0.95 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Other Metropolitan | 1.02 | 0.95 | 0.94 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 |
| Total | 1.03 | 1.00 | 1.00 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 |

Table D-15 S5102 Age Sex Adjustments (ECS Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.16 | 1.11 | 1.16 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Carver | 0.63 | 0.68 | 0.80 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 |
| Dakota | 1.14 | 1.14 | 1.05 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Hennepin | 1.11 | 1.10 | 1.11 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 |
| Ramsey | 1.13 | 0.99 | 0.88 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 |
| Scott | 1.31 | 1.23 | 1.26 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 1.50 | 1.16 | 1.19 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 |
| Washington | 1.26 | 1.04 | 1.09 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 |
| Rural | 0.88 | 0.96 | 0.97 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Micropolitan | 0.98 | 0.91 | 0.95 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Other Metropolitan | 1.02 | 0.95 | 0.94 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 |
| Total | 1.03 | 1.00 | 1.00 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 |

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Table D-16 S5100-U7 Age Sex Adjustments (ECS Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 1.16 | 1.11 | 1.16 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Carver | 0.63 | 0.68 | 0.80 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 |
| Dakota | 1.14 | 1.14 | 1.05 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Hennepin | 1.11 | 1.10 | 1.11 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 |
| Ramsey | 1.13 | 0.99 | 0.88 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 |
| Scott | 1.31 | 1.23 | 1.26 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 1.50 | 1.16 | 1.19 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 |
| Washington | 1.26 | 1.04 | 1.09 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 |
| Rural | 0.88 | 0.96 | 0.97 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Micropolitan | 0.98 | 0.91 | 0.95 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Other Metropolitan | 1.02 | 0.95 | 0.94 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 |
| Total | 1.03 | 1.00 | 1.00 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 |

Table D-17 S5102-U7 Age Sex Adjustments (ECS Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Anoka | 1.16 | 1.11 | 1.16 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Carver | 0.63 | 0.68 | 0.80 | 0.86 | 0.86 | 0.86 | 0.87 | 0.88 |
| Dakota | 1.14 | 1.14 | 1.05 | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 |
| Hennepin | 1.11 | 1.10 | 1.11 | 0.91 | 0.91 | 0.92 | 0.92 | 0.93 |
| Ramsey | 1.13 | 0.99 | 0.88 | 0.92 | 0.92 | 0.92 | 0.93 | 0.94 |
| Scott | 1.31 | 1.23 | 1.26 | 0.96 | 0.96 | 0.96 | 0.96 | 0.97 |
| Sherburne | 1.50 | 1.16 | 1.19 | 0.93 | 0.94 | 0.94 | 0.95 | 0.96 |
| Washington | 1.26 | 1.04 | 1.09 | 0.93 | 0.93 | 0.93 | 0.94 | 0.94 |
| Rural | 0.88 | 0.96 | 0.97 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Micropolitan | 0.98 | 0.91 | 0.95 | 0.94 | 0.95 | 0.95 | 0.96 | 0.97 |
| Other Metropolitan | 1.02 | 0.95 | 0.94 | 0.94 | 0.94 | 0.95 | 0.96 | 0.96 |
| Total | 1.03 | 1.00 | 1.00 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 |

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Table D-18 S5100-TF Age Sex Adjustments (ECS Age-Sex Factors)

| Region | SFY 2015 | SFY 2016 | SFY 2017 | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Anoka | 1.11 | 1.11 | 1.16 | 0.82 | 0.82 | 0.83 | 0.83 | 0.84 |
| Carver | 0.71 | 0.55 | 0.82 | 0.78 | 0.78 | 0.78 | 0.78 | 0.79 |
| Dakota | 1.34 | 1.29 | 1.11 | 0.81 | 0.82 | 0.82 | 0.82 | 0.83 |
| Hennepin | 1.09 | 1.05 | 1.16 | 0.84 | 0.84 | 0.85 | 0.85 | 0.86 |
| Ramsey | 1.15 | 1.12 | 1.04 | 0.86 | 0.86 | 0.86 | 0.86 | 0.87 |
| Scott | 1.29 | 1.12 | 0.98 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Sherburne | 2.21 | 1.41 | 1.15 | 0.88 | 0.89 | 0.89 | 0.90 | 0.91 |
| Washington | 0.98 | 0.84 | 1.03 | 0.87 | 0.87 | 0.87 | 0.87 | 0.88 |
| Rural | 0.87 | 0.92 | 0.94 | 0.91 | 0.92 | 0.93 | 0.94 | 0.95 |
| Micropolitan | 0.94 | 0.88 | 0.99 | 0.92 | 0.93 | 0.93 | 0.94 | 0.95 |
| Other Metropolitan | 1.02 | 0.91 | 0.93 | 0.90 | 0.91 | 0.92 | 0.92 | 0.93 |
| Total | 1.03 | 0.98 | 1.01 | 0.88 | 0.88 | 0.89 | 0.89 | 0.90 |

Appendix E Utilization & Unit Cost Assumptions

Table E-1 Starting Unit Cost & Annual Unit Cost Trends

| Proc Code/Modifier | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|
| S5100 | \$3.39 | 0.6% | 0.5% | 0.5% | 0.5% |
| S5102 | N/A | N/A | N/A | N/A | N/A |
| S5100-U7 | \$3.39 | 0.6% | 0.5% | 0.5% | 0.5% |
| S5102-U7 | N/A | N/A | N/A | N/A | N/A |
| S500-TF | \$7.58 | 0.3% | 0.5% | 0.5% | 0.5% |

Table E-2 Annual Utilization Trend - EW & ECS

| Proc Code/Modifier | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|
| S5100 | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| S5102 | -100.0% | 0.0% | 0.0% | 0.0% | 0.0% |

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| | | | | | |
|----------|---------|------|------|------|------|
| S5100-U7 | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| S5102-U7 | -100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| S500-TF | 6.0% | 6.0% | 6.0% | 6.0% | 6.0% |

Table E-3 Annual Utilization Trend - AC

| Proc Code/Modifier | SFY 2018 | SFY 2019 | SFY 2020 | SFY 2021 | SFY 2022 |
|--------------------|----------|----------|----------|----------|----------|
| S5100 | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| S5102 | -100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| S5100-U7 | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| S5102-U7 | -100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| S500-TF | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |

Appendix D: Summaries of Other State Adult Day Reimbursement Methodologies Evaluation of Rate Methodologies for Elderly Waiver and Related Programs Minnesota Department of Human Services

This appendix provides a description of selected states' adult day service payment methodologies and rates.

Arizona

Arizona has a very basic rate structure; however, it is useful to see the comparison between the differentiated structures of other states versus the fairly straightforward payment approach of Arizona. Similar to Texas, Arizona has many of their services in managed long-term care and the health plans may negotiate different rates with individual providers. Table D.1 below lists the rates developed by the state for these services.

Table D.1: Adult Day Service Rates in Arizona

| Time Increment | Rates |
|----------------|---------|
| Per 15 min | \$2.87 |
| Per half day | \$34.77 |
| Per diem | \$69.52 |

Arkansas

Arkansas has separate regulations for Adult Day Social (ADS) and Adult Day Health (ADH), but the general difference is that ADH includes the ability to provide assistance with medication administration, injection of insulin or other IM or Sub-Q injections by licensed personnel, as well as monitoring of each client's general health and medical regimen including screening of:

- Daily vital signs
- Daily hygiene
- Monthly weight
- Dental health, every six (6) months

This requires some different staffing levels. In Arkansas, the minimum ratio for ADS is 1:8 and for ADH is 1:5. ADH also must employ a full-time nurse as the center's health care coordinator. The payment rates are also differentiated based upon the model:

- Adult Day Social: \$2.50 for 15 minute increments
- Adult Day Health: \$3.12 for 15 minute increments

Colorado

Colorado distinguishes between Basic Adult Day Services (ADS) and Specialized Adult Day Services (SADS). There are different requirements for specific centers that allow them to qualify as an ADS or SADS. The specific differentiation is based upon the population served by the center, with the expectation that the SADS will require higher levels of care, including nursing services.

Colorado's regulations state:

Specialized Adult Day Services Center means a community-based entity determined by the State to be providing health supportive services for participants with a primary diagnosis of Alzheimer's and related disorders, Multiple Sclerosis, Brain Injury, Chronic Mental Illness,

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Developmental Disability or post-stroke participants who require extensive rehabilitative therapies. In order to be designated as specialized, two-thirds of an ADS Center's population must be participants whose physician has verified one of the above diagnoses and determined SADS is appropriate for the participant.²⁵

All ADS Centers must maintain a staff to participant ratio of 1:8. ADS must have two hours of nursing per day at a minimum; SADS must have nursing services (RN/LPN or CNA supervised by RN/LPN) at all times they are open.

Colorado has a differentiated rate structure depending on whether the center is an ADS or SADS:²⁶

- ADS: \$24.77 for ½ day (defined as 3-5 hours)
- SADS: \$31.62 for ½ day

Massachusetts

Massachusetts distinguishes between basic and complex care for individuals receiving adult day services. The distinction between basic and complex is codified in regulation based upon the types of services delivered. The actual distinction on services hinges upon the provision of skilled nursing. There are several lists of services in the regulations and the basic vs. complex definitions differ based upon which services are provided (<https://www.mass.gov/files/documents/2018/07/20/tl-adh-26.pdf>) Table D.2 below lists Massachusetts' adult day service rates.

Table D.2: Adult Day Service Rates in Massachusetts

| Description | Rate ²⁷ |
|----------------------------------|--------------------|
| Basic Level of Care (per diem) | \$58.83 |
| Complex Level of Care (per diem) | \$74.50 |
| Basic Level of Care (15 mins) | \$2.45 |
| Complex Level of Care (15 mins) | \$3.10 |

²⁵ <http://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=7555&fileName=10%20CCR%202505-10%208.400>

²⁶ <https://www.colorado.gov/pacific/sites/default/files/CCT%20FY%201819%20JULY%20Rate%20Schedules.pdf>

²⁷ <https://www.mass.gov/files/documents/2017/10/13/101-cmr-310-adult-day-health.pdf>

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Oklahoma

Oklahoma reimburses based upon a 15-minute unit that is standard for all centers across the state. Centers may receive add-on payments to the base-rate if they provide specific services to the participant. Table D.3 below lists the rates provided.

Table D.3: Adult Day Service Rates in Oklahoma

| Service | Time Increment | Rate |
|----------------------------------|----------------|---------|
| Adult Day Health | 15 minutes | \$1.88 |
| Adult Day Health – Personal Care | 1 session/day | \$7.50 |
| Adult Day Health – Therapy | 1 session/day | \$10.50 |

Oregon

Oregon does not establish statewide provider reimbursement rates for their adult day services. Instead, each provider negotiates a site-specific fee with the state agency. These negotiations are based upon a number of factors about each provider's costs and are further influenced by available appropriated funds for the services. The provider-specific rates are not published publicly; however, the state shared a database of paid claims during the month of May 2018 for NASUAD to review. Based on this review, the payment rates appear to range from \$42.85 to \$74.45 for a daily rate. According to state officials, they are considering whether to move towards an established statewide fee schedule in the future.

Texas

Texas funds ADS at a base-rate of \$14.30 for 3-5 hours of service. When an individual stays at a center for six or more hours of service, the center receives a payment of two units. However, Texas has a fairly unique add-on structure that results in thirty-six different payment rates. These thirty-six rates range from \$14.30 to \$16.05 per unit.²⁸ Each rate is increased using an incremental basis of \$0.05. These increased reimbursement rates are available to providers that agree to use funding for wage and benefit increases to their employees through Texas's rate enhancement attendant compensation program.²⁹ The actual rate level for a specific provider is determined based upon provider application for the program and available funding. Of note, these are the state-plan rates for adult day services. Texas has many of their services in managed long term care and the health plans may negotiate different rates with individual providers.

²⁸ <https://rad.hhs.texas.gov/sites/rad/files/documents/long-term-svcs/2015/2015-dahs-rates.pdf>

²⁹ <https://rad.hhs.texas.gov/long-term-services-supports/2019-rate-enhancement-attendant-compensation-information>

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Utah

Similar to Arizona, Utah has a standard statewide rate for adult day providers. This is a per-diem reimbursement of \$39.18. Unlike Arizona, Utah does not have any of its HCBS in managed care; therefore, these base rates are standard for all providers.

Washington State

Washington State has regulatory distinction between adult day health services and adult day care services. According to Washington's regulations:³⁰

An adult day center is a community-based program designed to meet the needs of adults with impairments through individualized goal specific plans of care. This type of structured, comprehensive, nonresidential program provides a variety of health, social, and related support services in a protective setting. Adult day centers support families and caregivers with the following goals:

- (a) Provide an opportunity for the client to live in his or her community;*
- (b) Provide the client with clinical and nonclinical services to meet unmet needs;*
- (c) Assist the client to maintain maximum independence in his or her activities of daily living (ADL); and*
- (d) Measure the client's progress through individualized interventions, as outlined in his or her negotiated care plan.*

The Washington regulations further specify that Adult Day Care must include the following services:

- (1) Assistance with activities of daily living;*
- (2) Social services on a consultation basis;*
- (3) Routine health monitoring;*
- (4) General therapeutic activities;*
- (5) General health education;*
- (6) A nutritional meal and snacks every four hours, including a modified diet if needed and within the scope of the program;*
- (7) Supervision and/or protection if needed for client safety;*
- (8) Assistance with arranging transportation to and from the program; and*
- (9) First aid and provisions for obtaining or providing care in an emergency.*

The regulations make a clear distinction between the social model of adult day and the health model of care. The state requires adult day health providers to cover all of the supports included in the previous adult day care requirements, as well as the following:

Skilled nursing services other than routine health monitoring with nurse consultation; or

³⁰ WAC 388-71-0701 through 388-71-0776 <http://apps.leg.wa.gov/WAC/default.aspx?cite=388-71>

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At least one of the following skilled therapy services: physical therapy, occupational therapy, or speech-language pathology or audiology, as defined under chapters 18.74, 18.59 and 18.35 RCW; and

Psychological or counseling services, including assessing for psycho-social therapy need, dementia, abuse or neglect, and alcohol or drug abuse; making appropriate referrals; and providing brief, intermittent supportive counseling.

Providers are reimbursed at a flat fee, per-day-per-client rate for all services rendered based on geographic area. Adult Day Health rates are based on legislative appropriation and determined based on four cost centers; direct care, administration and operations, transportation and capital costs. Three rates are then developed for King County, Metropolitan Service Areas and Non-Metropolitan Service Areas. Payment cannot exceed the prevailing charges in the locality for comparable services under comparable conditions. Table D.4 lists rates effective in SFY 2018.

Table D.4: Adult Day Service Rates in Washington

| Service | Payment Rate (Per Diem) |
|---|-------------------------|
| Adult Day Health intake evaluation | \$108.14 |
| Adult Day Health King County | \$75.42 |
| Adult Day Health Metropolitan Counties | \$69.85 |
| Adult Day Health, Non-Metropolitan Counties | \$66.86 |
| Adult Day Care King | \$46.81 |
| Adult Day Care Metropolitan Counties | \$41.73 |
| Adult Day Care Non-Metropolitan Counties | \$39.60 |

Of note, Washington does have rates for 15 minute billing increments; however, follow-up with the state revealed that these rates and associated billing codes are rarely used.

Wisconsin

Wisconsin does not establish any formal rates for their adult day services. Although the state did establish rates at one point, they have moved away from this approach as they moved most long-term services and supports into managed care. Wisconsin currently allows all of the health plans to negotiate payment rates individually with each adult day provider.

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Wyoming

In the state of Wyoming, adult day services can be provided at three levels of intensity: basic, intermediate and high. These rates were developed as part of a comprehensive rate review process and implemented in July 2018. In these three models, the staffing ratios and payment rates vary according to the level of intensity:

- 1:5 for basic
- 1:3 for intermediate
- 1:1.5 for high

Payment rates (all are 15 min units):

- Adult Day Service - Basic \$ 2.56
- Adult Day Service - Intermediate \$ 3.61
- Adult Day Service - High \$ 6.22