Disability Waiver Rate System

Minnesota Department of Human Services Disability Services Division

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Minnesota Department of **Human Services**

Legislative Report

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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 $35,000

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I. Executive summary

This is the third report to the legislature about analysis of the Disability Waiver Rate System (DWRS). Legislation enacted in 2013 required the Minnesota Department of Human Services (DHS) to implement DWRS. The system was implemented in January 2014. This report:

- Details evaluation and research on rate-setting components
- Projects long-term fiscal impacts of DWRS
- Provides recommendations for data-driven system changes.

DHS conducted complex analysis in 2015 and 2016 on the new rate methodology and the costs of providing home and community-based services in Minnesota. Based on this analysis, DHS recommends that the legislature make adjustments to DWRS.

We have based the recommended adjustments on three years' worth of data, research and analysis. The statute that authorized system implementation requires DHS to complete in-depth analysis to ensure costs accurately reflect rates.

DHS recommends the following:

- **Adjust component values for unit-based services:** An upward adjustment of component values will ensure that unit-based services are priced appropriately according to the actual costs of providing these services.
- **Remove respite care services from the frameworks:** Allowing these services to be purchased at market rates will allow service rates to better align with providers' costs to meet the needs of recipients.
- **Remove after-model budget neutrality factors from rate calculations:** Budget neutrality factors, applied at the end of the calculations, are the only framework factors in the rate-setting statute that are not attributed to provider costs. An approved CMS Corrective Action Plan requires removal of these factors by Dec. 31, 2018
- **Modify automatic inflationary adjustments required by Minn. Stat. §256B.49:** To better reflect the cost of providing services, DHS proposes removing duplicative inflationary factors in the rate formulas. This proposed change will align with CMS requirements for scheduled rate rebasing.
- **Implement a provider cost audit:** In conjunction with modification of inflationary adjustments, DHS recommends a provider cost audit. Audit data will help ensure rates reflect the cost of to provide services and inform future recommendations to the legislature.

These data-driven recommendations will help ensure access to services throughout the state. These changes also will ensure that rate frameworks will provide sustainable rate structures that more accurately reflect the cost of providing services. Sustainable rate structures will benefit individual service planning and ensure the best services for people who receive services through the four disability waivers. Additional information about recommendations are in the recommendations section of this report.

The DWRS was a significant change for the state. Legislation in 2013 was careful to allow for a five-year transition plan for full implementation of the system. This transition plan included rate

stabilization for people who received services in 2013, as well as rate stabilization for providers who provided services in 2013. The rates determined through the new rate methodology will not apply to most people and providers until calendar year 2019 or 2020. Therefore, current fiscal impact of DWRS is limited.

This report summarizes the analysis of second- and third-year data entries into the DWRS. It examines the projected long-term impact of DWRS on the price of providing services to ongoing disability waiver recipients on a statewide, service, provider and lead-agency level. In addition to fiscal impact estimates, legislation requires research and data gathering for specific cost components used to calculate rates within DWRS. This report details completed elements of the ongoing research plan and provides an overview of continuing and future analysis.

The findings in this report illustrate the projected long-term fiscal impact of DWRS when rate stabilization no is longer applicable. Currently, rate stabilization (also known as banding) expires in calendar year 2019. However, based on language in Minn. Stat. §256.4914 (authorized in 2015), DHS currently seeks a one-year implementation extension from the federal government to push that to 2020.

The estimated impact of DWRS is a 3 percent increase in projected spending for disability waiver services governed by the rate-setting frameworks that are detailed in this report. That amounts to approximately $97 million per year (federal and state spending combined). This projected increase is in addition to three legislatively required inflationary adjustments. These include:

1. Cost of living adjustments, which resulted in 7 percent increases authorized by the legislature in 2013 and 2014.
2. Component value adjustments of Bureau of Labor Statistic wage codes and Consumer Price Index values required in legislation and scheduled to take effect in July 2017.
3. Component value adjustments of Bureau of Labor Statistic wage codes and Consumer Price Index values required in legislation and scheduled to occur every five years beginning in 2022.

Future projections likely will increase as rate stabilization no longer is available and an increased number people are approved for rate exceptions by lead agencies and DHS. Despite the increase in total projected spending, the impact of DWRS does vary with some providers, services and lead agencies showing increases while others indicating decreases.

As mentioned, this report and its recommendations are the result of three years of comprehensive research and analysis. During the remaining three (or pending CMS approval, four years) of banding protection, DHS will continue to focus on careful analysis to ensure:

- Components within the DWRS accurately reflect the cost of providing services
- Recipients continue to have access to the quality services they need
- DWRS is implemented fairly and consistently throughout the state.

II. Legislation

Minnesota Statute, section 256B.4914, subdivision 10 requires the Department of Human Services to submit a report on the status of the implementation and the additional data and summary information as follows:

Subd. 10. **Updating payment values and additional information.**

(a) From January 1, 2014, through December 31, 2017, the commissioner shall develop and implement uniform procedures to refine terms and adjust values used to calculate payment rates in this section.

(b) No later than July 1, 2014, the commissioner shall, within available resources, begin to conduct research and gather data and information from existing state systems or other outside sources on the following items:

(1) differences in the underlying cost to provide services and care across the state; and

(2) mileage, vehicle type, lift requirements, incidents of individual and shared rides, and units of transportation for all day services, which must be collected from providers using the rate management worksheet and entered into the rates management system; and

(3) the distinct underlying costs for services provided by a license holder certified under section 245D.05, 245D.06, 245D.07, 245D.071, 245D.081, and 245D.09, and for all services provided by a license holder certified under section 245D.33.

(c) Using a statistically valid set of rates management system data, the commissioner, in consultation with stakeholders, shall analyze for each service the average difference in the rate on December 31, 2013, and the framework rate at the individual, provider, lead agency, and state levels. The commissioner shall issue semiannual reports to the stakeholders on the difference in rates by service and by county during the banding period under section 256B.4913, subdivision 4a. The commissioner shall issue the first report by October 1, 2014.

(d) No later than July 1, 2014, the commissioner, in consultation with stakeholders, shall begin the review and evaluation of the following values already in subdivisions 6 to 9, or issues that impact all services, including, but not limited to:

(1) values for transportation rates for day services;

(2) values for transportation rates in residential services;

(3) values for services where monitoring technology replaces staff time;

(4) values for indirect services;

(5) values for nursing;

(6) component values for independent living skills;

(7) component values for family foster care that reflect licensing requirements;

(8) adjustments to other components to replace the budget neutrality factor;

(9) remote monitoring technology for nonresidential services;

(10) values for basic and intensive services in residential services;

(11) values for the facility use rate in day services, and the weightings used in the day service ratios and adjustments to those weightings;

(12) values for workers' compensation as part of employee-related expenses;

(13) values for unemployment insurance as part of employee-related expenses;

(14) a component value to reflect costs for individuals with rates previously adjusted for the inclusion of group residential housing rate 3 costs, only for any individual enrolled as of December 31, 2013; and

(15) any changes in state or federal law with an impact on the underlying cost of providing home and community-based services.

(e) The commissioner shall report to the chairs and the ranking minority members of the legislative committees and divisions with jurisdiction over health and human services policy and finance with the information and data gathered under paragraphs (b) to (d) on the following dates:

(1) January 15, 2015, with preliminary results and data;

(2) January 15, 2016, with a status implementation update, and additional data and summary information;

(3) January 15, 2017, with the full report; and

(4) January 15, 2019, with another full report, and a full report once every four years thereafter.

III. Introduction

The Department of Human Services (DHS) submits this report to the Minnesota Legislature as required in Minn. Stat., §256B.4914, subd. 10. It directs DHS to submit reports about the Disability Waiver Rate System (DWRS) on specific dates. This is the third in those reports.

Statute requires the DHS commissioner to analyze, by service, the difference in the rate on Dec. 31, 2013, and the framework rate at the individual, provider, lead-agency and state levels.

A. Background

In 2007, the Centers for Medicare & Medicaid Services (CMS) informed Minnesota that its four disability waivers were out of compliance with federal requirements for uniform rate-determination methods and standards. The disability waivers are the:

- Brain Injury (BI) Waiver
- Community Alternative Care (CAC) Waiver
- Community Access for Disability Inclusion (CADI) Waiver
- Developmental Disabilities (DD) Waiver.

CMS issued a corrective action plan to Minnesota. It required Minnesota to establish statewide rate-setting methodologies. DHS built the plan, which led to the DWRS.

In January, 2012, Navigant Consulting Inc., an independent research firm, presented recommendations to DHS. The recommendations were based on complex and extensive research on the cost of providing disability waiver services in Minnesota. This research included a review of national and local independent data sources as well as a disability service provider cost and wage survey.

Since 2009, workgroups that include service providers and lead-agency staff have met and provided input in this process. DHS also established a stakeholder advisory committee that has been meeting on a monthly basis since 2011.

After stakeholder input and legislative negotiations, the legislature finalized the Disability Waiver Rate System during the 2013 legislative session. This system transferred the responsibility of setting service rates from counties and tribes to the state. The system made renewal of the Minnesota disability waivers possible.

The DWRS was a significant change for the state, lead agencies and providers. It required extensive work and thousands of hours of training in order to learn the new rate-setting system.

Due to the significance of this change, legislation was careful to allow for a five-year transition plan for full implementation of the new system. This process allowed time to adjust the system and ensure that we maintained service quality.

In January 2014, the system went live on a rolling basis as recipients renewed their service agreements. Lead agencies use the Disability Waiver Rate System to calculate a framework rate for each recipient and service. From 2014 through 2018, rates calculated by DWRS are “banded”

to their historic rate. Banding protection limits the amount rates can change for people who had services in 2013.

Banding protections are as follows:

- Calendar Year 1 (2014): 2014 rates are limited to be within 0.5 percent of their 2013 rates
- Calendar Year 2 (2015): 2015 rates are limited to be within 0.5 percent of their 2014 rates
- Calendar Year 3 (2016): 2016 rates are limited to be within 1.0 percent of their 2015 rates
- Calendar Year 4 (2017): 2017 rates are limited to be within 1.0 percent of their 2016 rates
- Calendar Year 5 (2018): 2018 rates are limited to be within 1.0 percent of their 2017 rates
- Calendar Year 6 (2019): Rates calculated in 2019 are full framework rates.

Legislation passed in 2015 changed the banding schedule by adjusting the 2016 banding value to 0.5 percent and adding an additional banding year in calendar year 2020.

The original banding values and schedule authorized by the 2013 legislature were subject to CMS approval. Subsequent banding value and schedule changes also are subject to federal approval. The banding value change and the additional year of banding authorized by the legislature in 2015 are part of DHS' federal waiver amendment package, which CMS has not yet approved. In order to remain in compliance with federal waiver amendments, DHS will implement the banding schedule as previously approved by CMS until it receives final CMS approval or denial. DHS will adjust the banding schedule dependent upon CMS decisions.

DHS designed banding protections to give adequate time to conduct appropriate and complex research on the rate-setting system prior to statewide full implementation. This report highlights the data trends in the system through the second year of implementation. Using the fiscal findings from the first two years of implementation, DHS designed a focused evaluation strategy of DWRS components and system usage for the subsequent research years. In addition to reporting fiscal findings, this report will summarize the evaluation strategy of DWRS.

B. How the system works

An application, known as the Rates Management System (RMS), calculates rates. Individual needs, as directed by service planning, are the basis for direct-service costs. Direct-service wages are the primary driver for rates. Other costs values, such as staff supervision, employee benefits, taxes, program costs and other cost components also are incorporated within the frameworks. Direct wages and component values are multiplied by the required service units to provide costs related to individual needs.

The majority of services provided in the disability waivers have rates governed by Rate Management System (RMS). But, it is important to note that rates for some services, such as chore services and environmental modifications, still are priced at market rates.

C. System goals

The goals of the system were to create statewide rate-setting methodologies that:

- Are transparent, fair and consistent across the state

- Comply with federal requirements for administration of waiver programs
- Establish rates based on a uniform process of structuring component values for service
- Promote quality and participant choice
- Recognize a person's assessed need for particular components within each service.

D. Implementation years

During this period of implementation, DHS will use data to both improve the system and reduce any potential problems. As we gather the results of ongoing research, we increasingly will have better data. That will help us identify evidence-based improvements. As we receive information, we will share it with stakeholders for review.

During this period, DHS is committed to continued collaboration with provider representatives, lead agency representatives and other stakeholders to ensure the disability waiver rates system is applied uniformly.

E. Federal oversight

The federal Centers for Medicare & Medicaid Services (CMS) oversee Minnesota's four disability waivers. Due to inconsistent rate-setting methods in Minnesota, CMS placed the state under a corrective action plan. It required Minnesota to implement a statewide rate-setting methodology for disability waiver services. Failure to comply with the corrective action plan would have jeopardized all federal funding of the disability waivers. The new system (the DWRS) established a consistent formula for setting rates for disability waiver programs. It was outlined in statute.

Implementation of the DWRS, as well as other changes required by the corrective action plan, brought Minnesota's four disability waivers into federal compliance. Minnesota still has several items to complete to ensure ongoing compliance with the plan. CMS requires:

- Rate stabilization adjustment (banding) to be eliminated by Dec. 31, 2018. (However, we have requested approval from CMS to extend banding until Dec. 31, 2019. This is described in current statute.
- The budget neutrality factor to be phased out on or before Dec. 31, 2018.

The penalties of non-compliance potentially include CMS withholding federal funding and delaying approval of waiver amendments.

CMS requires rebasing of all service rates on a five-year basis. Rebasing requires DHS to identify service access issues which may be caused by rate payment structures and ensure that current rates appropriately reimburse the cost of service provision. CMS requires re-basing to include a consistent methodology that reflects the cost to provide services. In addition to rate rebasing, CMS requires system compliance reporting on an annual basis to ensure a consistent rate methodology is maintained.

IV. Impact analysis

This report summarizes the projected long-term impact of the DWRS on the price of providing services to ongoing disability waiver recipients. The analysis and findings in this report highlight the projected impact to rates on a service, lead agency, provider and individual level.

A. Analysis methodology

This report measures the projected fiscal impact of DWRS. To determine the impact, we studied the percent difference in the rate per unit for recipients who had the same services authorized in 2013 and currently. The objective of this analysis is to measure the direct impact of DWRS while excluding other factors that may affect rates. Therefore, this study is limited to the following specifications:

- **Ongoing recipients:** We measured the impact of DWRS by only looking at recipients who received the same service from the same provider in both time periods. This report do not include recipients who had a change in service or provider since December 2013. It also does not include new recipients of service. In order to be included, the person must have had an approved service line in December 2013 for the same service and provider.

- **Rate Management System (RMS) usage:** This study only includes service agreement lines RMS used to calculate a rate that was then entered into MMIS. In order to be included in this study, each service agreement line must have an identical record in both databases.

- **Holding units constant**: In order to isolate projected changes in the actual rates, this study does not consider changes to the number of units authorized and/or paid.

- **Cost-of-living increases:** Since the initial implementation of DWRS, there have been three cost-of-living increases approved through the legislature that total 7 percent. In order to isolate the impact of the service-rate calculation method itself, this study accounts for cost-of-living rate increases by adjusting both historic and framework rates accordingly.

- **Bureau of Labor Statistic (BLS) wage code and Consumer Price Index (CPI) updates:** The legislature requires DHS to update component values in DWRS according to changes in the BLS wage codes and Consumer Price Index in July 2017. These updates will increase cost values within the frameworks. This analysis considers the estimated impact of these adjustments by adjusting the study findings by the additional estimated cost of these adjustments beyond the amount of cost-of-living adjustments.

- **Rate exceptions:** This study includes all ongoing recipients who have received the same service in both time periods, regardless of whether they will receive a rate exception when banding protections are not applicable. Because the likelihood of requiring a rate exception depends on framework rates authorized in 2019 or 2020, any changes to the frameworks before that date (such as BLS and CPI changes), will impact the cost of rate exceptions. A rate exception study was conducted in 2015, however framework changes made after that date likely will change the number and cost of rate exceptions when

banding no longer is applicable. Therefore, the findings in this analysis do not consider rate exceptions. However, we expect that rate exceptions will increase the fiscal impact of DWRS implementation. As rate exceptions are approved by lead agencies and DHS during the implementation period, analysis will modify the impact projections accordingly.

Limitations

The DWRS implementation period happens over a five- or six-year period. Within this period, there will be a lot of changes that happen occur regardless of the rate methodologies. Examples include:

- Changes in a person's choice of services and/or providers
- Changes in the amount of service a person needs
- New recipients
- Changes in the services available to disability waiver recipients.

This report does not consider these other factors.

Because this report does not consider service-purchasing changes, the results do not measure the precise fiscal impact of DWRS on paid claims. Likewise, this analysis does not measure the impact to provider revenues or lead agency budgets. This analysis measures the difference in the actual rates. It compares the rates authorized under historical negotiated rate-setting methods to the projected rates calculated by the statewide DWRS.

Data

This analysis examined approved service agreement lines from July 1, 2015, through June 30, 2016. It includes 18,185 recipients and 1,701 providers.

Definitions and measures

This report evaluates the impact of DWRS by estimating the 2019 projected impact to rates. This is the percent difference between the average rate per unit in 2013 and the framework rate calculated by the DWRS.

B. Summary of findings

Statewide

The total projected statewide impact of the DWRS across all services is a 3 percent increase in the rate per unit for DWRS services. That will be approximately $97.6 million per year (state and federal share combined) in fiscal year 2022. This projection is in addition to the cumulative 7 percent increase in spending for cost-of-living adjustments approved by the legislature since the implementation of DWRS.

The projected impact of DWRS will be an increase of up to 2.2 percent as rate exceptions are approved when banding protections expire in calendar year 2019 or 2020. The impact of DWRS also will increase over time with additional inflationary adjustments to rate components (required by statute every five years following 2017).

For more information on automatic inflation adjustments, see the Regional Variance Factors factsheet (PDF).

Findings by service

This analysis measures the projected fiscal impact to rates on a service-category level. Service categories are groupings of services that include all procedure codes for a particular service type. For example, all foster care services (family, corporate, adult and child) are included in the foster care service category.

Table 1 shows the percent change currently projected for rates currently calculated in the system and the final projected change estimated for each service category after inflation adjustments occur in July 2017.

Table 1: Projected impact of DWRS to rates, by service category

Service category	Number of recipients in fiscal year 2015	Difference between historic and framework rates	Difference between historic and framework rates after BLS and CPI adjustments
Adult day services	2,070	10.0%	16.7%
Behavior programming	643	2.7%	10.7%
Customized living services	3,365	2.5%	2.5%
Day training & habilitation	10,607	-9.3%	-4.0%
Foster care services	5,505	0.3%	3.8%
In-home family support	2,493	0.6%	5.8%
Independent living skills	6,453	-26.4%	-21.1%
Personal support and companion care	1,962	17.9%	17.9%
Prevocational services	2,835	-17.2%	-10.3%
Residential care services	216	-16.4%	-16.4%
Respite care services	3,253	10.6%	10.6%
Supported employment services	2,432	-0.1%	9.7%
Supportive living services, 15 minute	1,373	-4.5%	4.8%
Supportive living services, daily	9,635	1.8%	5.4%
STATEWIDE	**30,440**	**-0.35%**	**3.3%**

Note: Residential care service is being eliminated before the banding period ends. This service currently is used by approximately 216 people who will have access to different waiver services.

More information on the estimated inflationary adjustments, according to changes in Bureau of Labor Statistics (BLS) and Consumer Price Index (CPI), are in the inflationary adjustments section of this report.

In addition to the findings in Table 1, additional spending will be incurred on rate exceptions. Exceptions will increase the final impact of DWRS upon expiration of banding protections in 2019 or 2020. For more information on projected rate exceptions, see the Disability Waiver Rate System page.

For a detailed table that lists study findings by procedure code, go to Appendix A.

Findings by service area

This report outlines the projected impact to the following service areas:

- Services that provide residential supports
- Services that provide day and employment supports
- Unit-based services.

These service grouping illustrate how DWRS implementation impacts specific areas of the home and community-based service delivery system based on the function of service provided to people.

Services providing residential supports

Residential support services are services provided to people as part of a residential program. They include:

- Corporate and family foster care services
- Corporate and family daily supportive living services
- Customized living services
- Residential care services.

In fiscal year 2015, spending on residential support services accounted for 75 percent of total DWRS spending (approximately $1.2 billion).

All residential support service categories (except residential care services) project an increase in spending upon full implementation of DWRS. Upon banding expiration, residential care services no longer will be offered as a service under HCBS waiver programs. Current recipients will migrate to other service options. Table 2 shows the analysis for all services that provide residential supports.

Table 2: Projected impact of DWRS to rates, for services providing residential supports

Service name	Service unit	Number of recipients in fiscal year 2015	Prior to July 2017, percent difference in historic and framework rates	Percent difference in historic and framework rates after July 2017 BLS and CPI adjustments
Customized living services, 24-hour	Daily	2,559	0.5%	0.5% (see note)
Customized living services	Daily	1,264	12.1%	12.1%
Foster care, adult, corporate	Daily	4,588	-2.6%	0.9%
Foster care, adult, family	Daily	1,078	48.4%	52.9%
Foster care, child, family	Daily	128	13.4%	16.8%
Residential care services	Daily	216	-16.4%	-16.4%
Supportive living services, Adult, Family	Daily	841	3.3%	6.4%
Supportive living services, Adult, Corporate	Daily	9,123	1.8%	5.4%
Supportive living services, Child, Family	Daily	111	4.2%	7.3%

NOTE: The services of customized living, 24-hour customized living, and residential care services are not projected to receive increases according to BLS and CPI adjustments because components in their rate frameworks are not subject to BLS wage codes and CPI-based component values.

In addition to the findings in Table 2, we estimate that rate exceptions in this service area will have particularly high costs compared to other services due to the fact that residential services make up a majority of DWRS spending. Analysis from the 2015 exceptions research study concluded that residential services is a primary service area of projected exceptions. Rate exceptions for these services may account for up to an additional 1.73 percent of total residential service spending. Because this study was conducted before inflationary adjustments in 2017, the projection of the impact of DWRS will change when more statewide data is available to identify the specific people who will require rate exceptions. Find more information on the exceptions research study section of this report.

Accounting for individual need: DWRS vs. historic-rate methodology

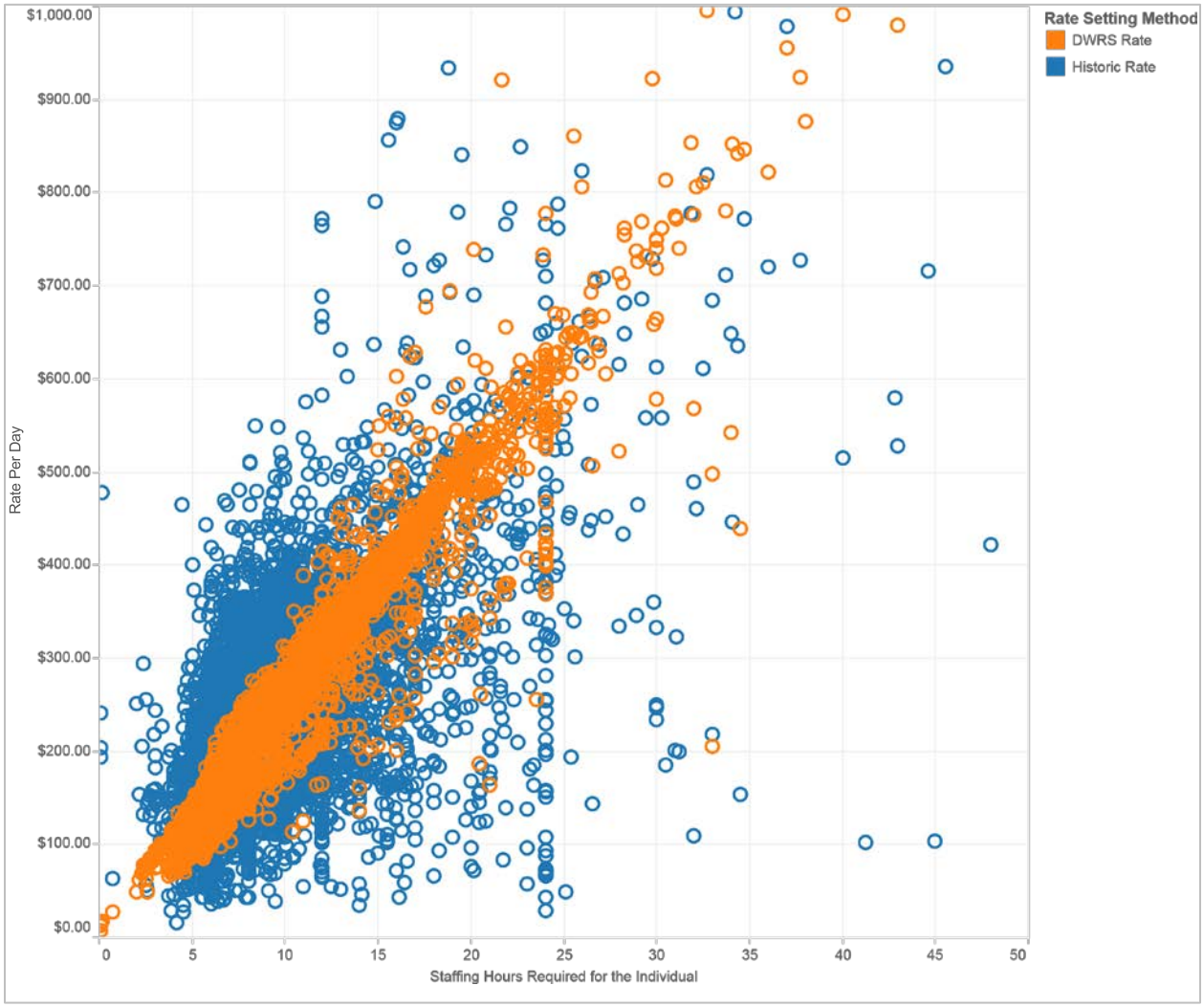
The goal of DWRS was to implement a statewide rate methodology that allowed for a systematic way of to calculate rates that achieved consistency and fairness throughout the state, while at the same time, reflect the needs of the person.

Before DWRS, rates were set through negotiations between providers and lead agencies. In some instances, people with higher needs resulted in higher rates, however this was not systematic. Recipients with similar needs who receive the same service from different providers or in different lead agencies had wide variability in their rates.

Typically people with higher needs require more staffing to meet those needs. This increases the cost of providing the service for the provider. Through DWRS, rates for residential support services reflect these higher costs through the mechanism of staffing hours. Figure 3 shows how historically negotiated rates (in blue) and DWRS rates (in orange) relate to the number of daily

staffing hours required for the person. While it is evident that some historically set rates did relate to the person's needs, this graph shows that the variation was wide. DWRS rates, however, are closely aligned with the level of care needed for the person.

Figure 1: Correlation between the rate per day and staff time required for the individual, by historic negotiated rate setting method and the DWRS rate setting method



NOTE: DWRS rates in this graph reflect rates calculated by DWRS prior to BLS and CPI inflation adjustments in July 2017

Services that provide employment and day supports

Employment and day services are services provided to people during the day at a facility or place of employment in the community. These services include:

- Adult day care services
- Day training and habilitation services (DT&H)
- Prevocational services
- Supported employment services.

Spending on day and employment support services account for 14 percent of total DWRS spending (approximately $232 million in state fiscal year 2015).

Table 3 shows the findings for these services.

Table 3: Projected impact of DWRS to rates, for services providing day and employment supports

Service name	Service unit	Number of recipients in fiscal year 2015	Before July 2017, percent difference in historic and framework rates	Percent difference in historic and framework rates after July 2017 BLS and CPI adjustments
Adult day care	15 minutes	1,191	11.1%	16.9%
Adult day care	Daily	1,166	9.3%	16.9%
Adult day care, bath	15 minutes	79	-23.3%	-19.3%
DT&H/structured day	15 minutes	945	6.7%	15.5%
DT&H /structured day	Daily	10,098	-10.0%	-4.3%
DT&H partial day	Partial day	6,979	0.8%	0.8% (see note)
Prevocational services	Daily	2,131	-15.2%	-8.2%
Prevocational services	Hourly	1,656	-23.2%	-16.8%
Supported employment, 1:1 ratio	15 minutes	2,328	0.2%	10.0%
Supported employment, 1:2 ratio	15 minutes	56	-6.7%	2.4%
Supported employment, 1:3 ratio	15 minutes	134	-22.0%	-14.3%

NOTE: Day training and habilitation partial day rates are not calculated by DWRS frameworks and do not receive increases according to BLS and CPI changes.

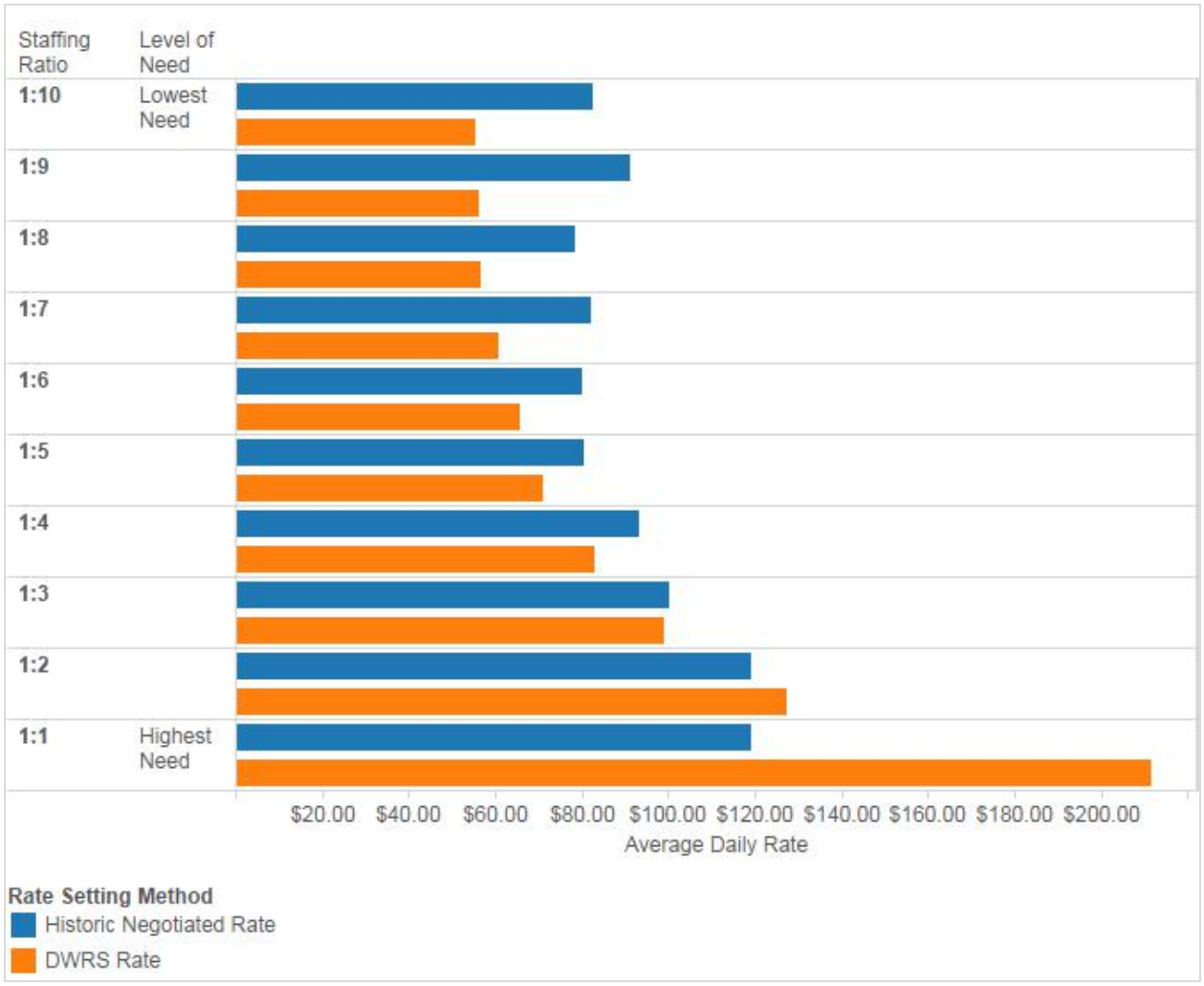
As Table 3 illustrates, we project a decrease in rates for day training and habilitation services and prevocational services when DWRS is fully implemented. Services in this area also are projected to have the highest concentration of rate exceptions, as a percentage of total bucket spending. Find more information on the exceptions research study section of this report.

Accounting for individual need: DWRS vs. historic rate methodology

Through DWRS, rates are based on a person's needs through the idea of staffing ratios. People who have needs that require a higher level of individual staff time will require a staffing ratio closer to 1:1 (one staff member for every one service recipient), whereas people who require a lower level of care will require a staffing ratio closer to 1:10 (one staff member for every ten service recipients).

Figure 2 illustrates how historic negotiated rates for day training and habilitation services (in blue) and their calculated DWRS rates (in orange) relate to the staffing ratio required for the person. In DWRS, rates for people that require more individual staff time are higher than those that don't require as much individual care. Historical negotiated rates, however, were often facility-based rates and negotiated regardless of the needs of the person. Therefore, people who needed minimal support at a 1:10 ratio frequently had the same rates as people who needed more support, such as at a 1:5 ratio.

Figure 2: Average rate according to rate setting method and recipient need, daily day training and habilitation services



NOTE: DWRS rates in this graph reflect rates calculated by DWRS prior to BLS and CPI inflation adjustments in July 2017.

DHS is working with stakeholder groups to design new services and service delivery models which increase:

- Competitive employment in the spirit of the Olmstead plan
- Community integration in the spirit of the federal home and community based services size and setting rule (released by CMS in January 2014).

Future changes to day and employment services could:

- Increase the use of employment-related services
- Create opportunities for specific specialized employment service options to meet the needs and expectations of Minnesotans with disabilities
- Better track competitive and integrated employment outcomes.

When new day and employment service options are implemented, and service changes occur, the rate projections for this service category will change. Because individual service planning takes place on an annual basis, DHS cannot project the impact of future changes in this service category.

Unit-based service supports

Unit-based supports are services provided to people in their home or in the community based on their needs as defined in their support plan. They include:

- Behavioral support
- In-home family support
- Independent living skills
- Night supervision
- Personal support
- Respite care,
- 15-minute supportive living services.

Unit-based services currently account for 11 percent of total DWRS spending (approximately $187 million in state fiscal year 2015).

Table 4: Projected impact of DWRS to rates, for services providing unit based supports

Service name	Service unit	Number of recipients in fiscal year 2015	Before July 2017, Percent difference in historic and framework rates	Percent difference in historic and framework rates after July 2017 BLS and CPI adjustments
Behavior support by analyst	15 minutes	537	-8.1%	-0.3%
Behavior support by professional	15 minutes	577	-21.8%	-18.6%
Behavior support by specialist	15 minutes	146	35.1%	47.5%
Independent living skills, training, 1:1	15 minutes	6,452	-26.4%	-21.1%
In-home family support	15 minutes	2,493	0.6%	5.8%
Personal support/adult companion	15 minutes	1,962	17.9%	17.9%
Respite care services, in home	15 minutes	2,092	11.9%	11.9%
Respite care services, in home	Daily	317	11.8%	11.8%
Respite Care Services, out-of-home	15 minutes	676	14.9%	14.9%
Respite Care Services, out-of-home	Daily	884	-7.8%	-7.8%
Supportive living services, adult, family	15 minutes	977	-3.5%	6.0%
Supportive living services, Adult, Corporate	15 minutes	769	-6.9%	2.2%

NOTE: With projected July 2017 BLS and CPI updates applied, rates for personal support, adult companion, and respite care services do not exceed current framework rates with cost-of-living adjustments.

The role of unit-based supports in the future

Demand for unit-based services is expected to grow as more people live and work independently in the community. While demand is expected to grow, the supply of providers across the state is dependent on the labor market.

Respite services were the leading service identified by lead agencies, providers and people in the long-term services and supports biennial gaps analysis. DWRS fiscal analysis found the rate for daily respite to be insufficient for many providers to meet the needs of service recipients. DHS recommends that daily respite services be removed from DWRS. For more information on recommendations to change framework components, see the report recommendations section.

Findings by lead agency

Legislation requires this analysis to also look that the projected impact to rates for each lead agency. A lead agency, as measured in this study, is the county or tribal region where the person who receives services lives. This analysis measures the change to rates, but does not measure differences in spending or the fiscal impact on lead agency budgets.

This section summarizes the projected impact of DWRS on lead agency rates on an aggregate level. The report calculates the change by considering, for each lead agency, all service authorizations across all buckets for recipients that had both 2013 and current authorizations. The impact analysis in this report compares rates in both periods and does not consider the additional factor of rolling implementation. DHS will assess the actual fiscal impact on lead agencies as implementation continues and data about claims is collected. DHS is required to adjust lead agency budgets to account for the impact of DWRS.

Additionally, this level of analysis does not include recipients of rate exceptions, which could significantly affect the 2019 projections for some agencies. As rate exceptions are approved by lead agencies and DHS throughout the banding years, we will modify lead agency projections.

When banding no longer applies and lead agencies use all framework rates in 2019 or 2020, the projected impact of DWRS on lead agency service rates varies greatly, ranging from an 11 percent decrease to a 110 percent increase. However, 50 percent of lead agencies project a change of five percent or less. A change of ten percent or less is expected by 69 percent of lead agencies.

The following statistics summarize distribution of the projected impact across the state:

- The average change projected for lead agencies as a whole is a 9 percent increase.
- The median change projected for lead agencies as a whole is a 5 percent increase.
- 75 percent of lead agencies project an increase in aggregate rates while 19 percent project a decrease. Six percent of lead agencies project no change in aggregate rates.

Figure 3 shows the frequency distribution among lead agencies while Figure 4 shows the distribution geographically. More lead agencies project an increase than a decrease. Some of the state's largest lead agencies, who have the most recipients and highest disability waiver spending, project a decrease.

Figure 3: Distribution of projected impact of DWRS to lead agency service rates

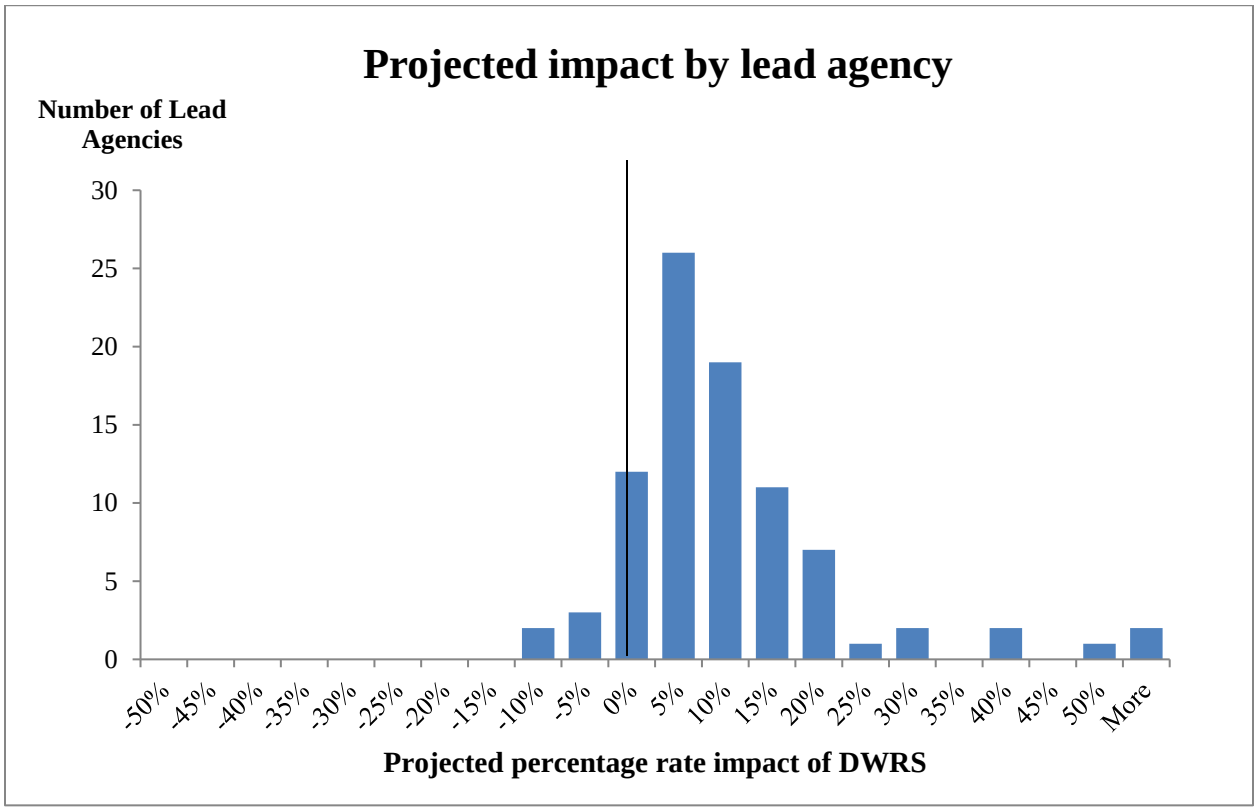
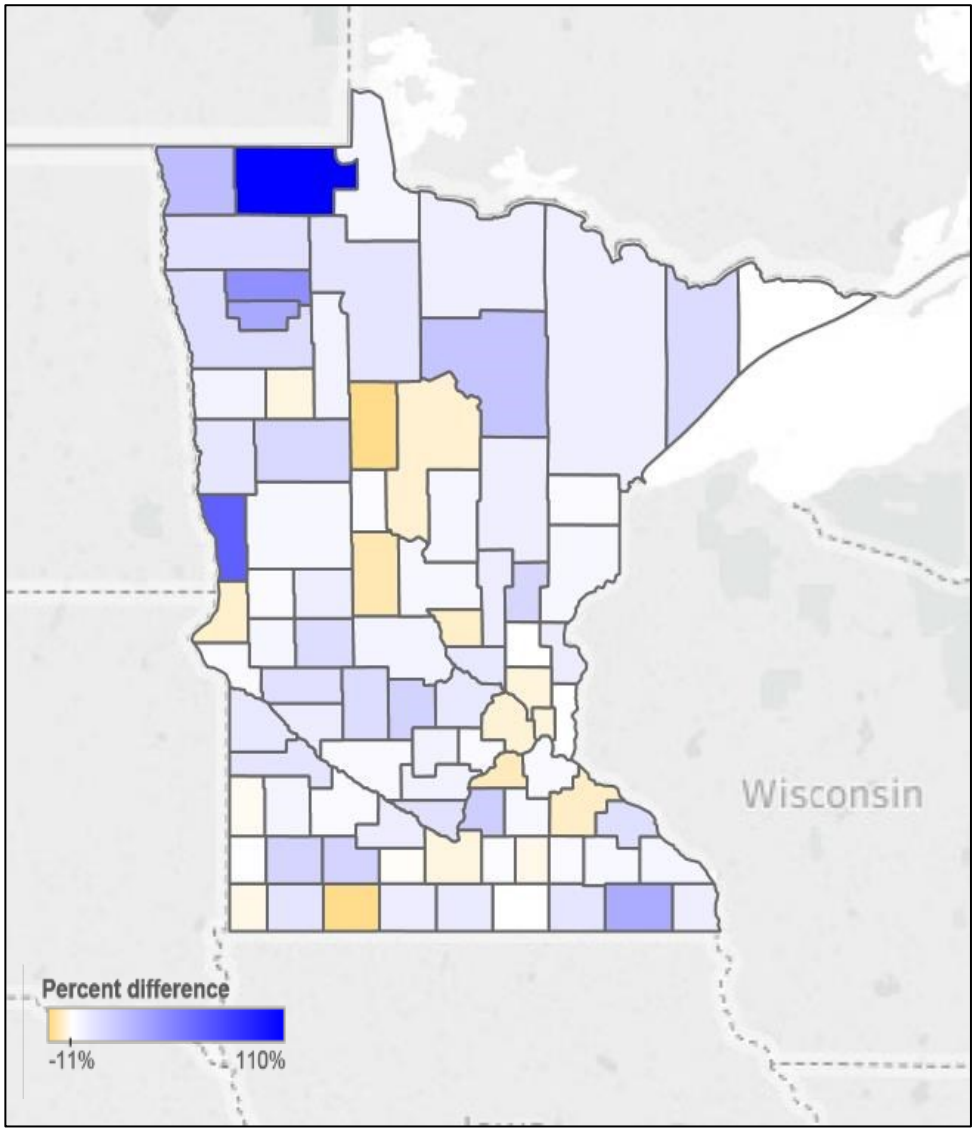


Figure 3 demonstrates that the number of lead agencies that project an increase in 2019 is larger than the number of agencies that project a decrease. It also shows that most lead agencies project a change of ten percent or less, and that there are more lead agencies with large increases than there are with large decreases.

As indicated in these findings, the projected impact of DWRS in 2019 varies widely among lead agencies. This largely is due to historic rates having wide variability across the state before the implementation of DWRS. Figure 4 illustrates the variability of the projected change across the state's lead agencies.

Figure 4: State of Minnesota map, projected 2019 impact by lead agency



For a more detailed look at the projected fiscal impact of DWRS on each lead agency (on the level of both county of residence and county of financial responsibility), go to Appendix B.

Findings by provider

This section summarizes the projected impact of DWRS on providers' rates on an aggregate level, as identified by their federal tax ID number. A provider's federal tax ID number includes all national provider numbers (NPIs) and provider identification numbers that each provider bills under. This analysis includes 1,078 providers with 1,701 provider identification numbers.

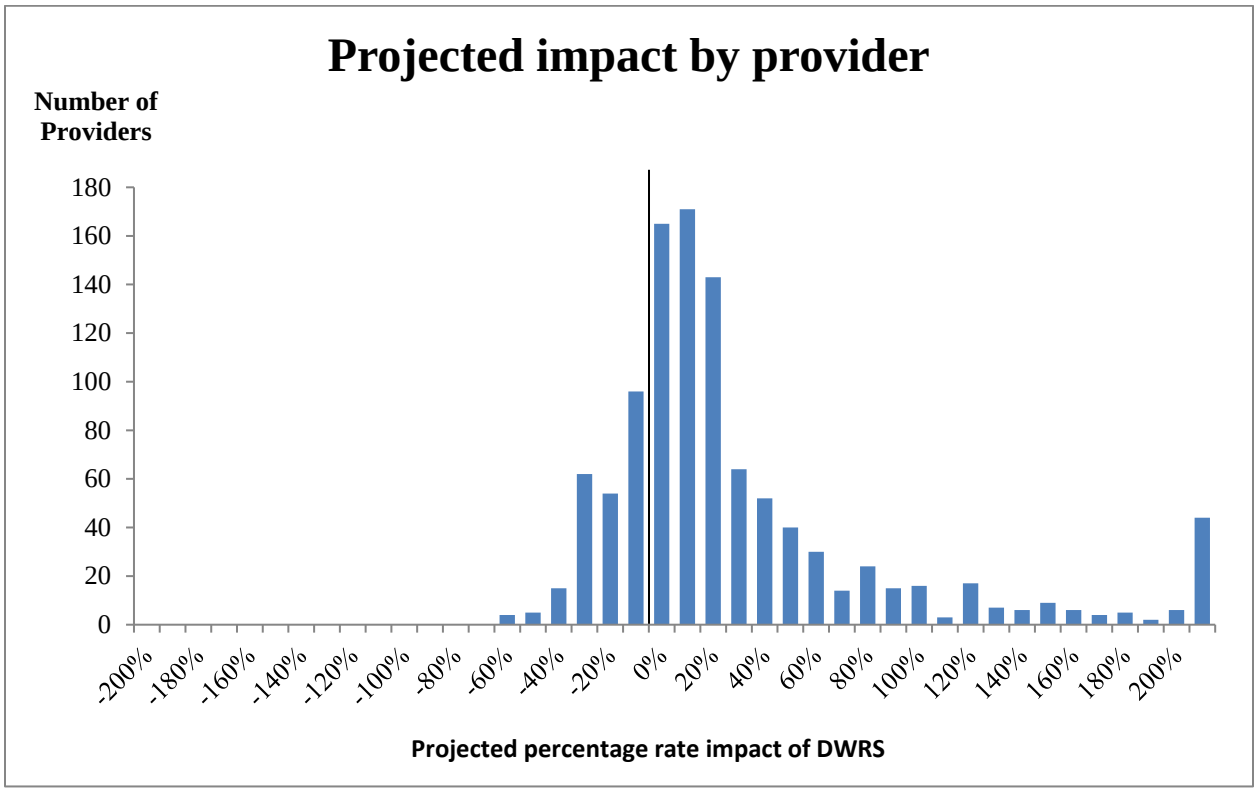
This level of analysis does not include rate exception projections, which could significantly impact the 2019 projections for providers. As rate exceptions are approved by lead agencies and DHS throughout the banding years, these projections will change.

When banding no longer applies and full framework rates are authorized in 2019 or 2020, the projected impact of DWRS on providers varies widely. The following statistics summarize trends seen on a provider level, as measured by rates authorized for each provider:

- The median percent change in rates projected for all providers is an eight percent increase
- One-third of all providers project a change of ten percent or less
- Sixty-three percent of providers project an increase in 2019/2020
- Thirty-seven percent of providers project a decrease in 2019/2020.

Figure 5 shows the frequency distribution of providers' projected change in 2019 or 2020.

Figure 5: Distribution of projected impact of DWRS to service provider rates



As seen in Figure 5, the projected impact varies widely among all providers across the state and across waiver services. The variable impact among providers depends on many factors, such as:

- Historical rate setting methods
- Number of recipients served
- Type of services delivered by providers.

Figure 5 also shows that while there are some providers projected to experience large decreases, most providers will experience increases. There are many more providers projected to have large increases than those projected to have large decreases.

For more details on the estimated impact to providers, go to Appendix C.

Findings by recipient

This section summarizes how DWRS implementation is projected to affect the rates of each recipient. We calculated these statistics by:

1. Considering all DWRS services that a person has been authorized for in both time periods
2. Determining the total percent change projected for the person across all services.

This analysis does not include changes in service authorizations or services not priced by DWRS.

The following statistics summarize the projected impact to recipients' aggregate rates:

- The average change projected for recipients' aggregate rates is a 4 percent increase.
- The median projected change is a 1 percent decrease.
- Forty-eight percent of recipients project an increase in their aggregate rates.
- Fifty-two percent of recipients project a decrease in their aggregate rates.
- More than one-third of recipients project a change in rates of 10 percent or less.

As with other findings in this report, these analysis trends vary widely and depend on many factors, such as:

- Historical rate-setting methods
- Number of services authorized
- Types of services authorized.

This analysis also is particularly susceptible to significant changes in rate exceptions. As DHS and lead agencies approve rate exceptions during the banding years, we will modify projections.

For more details on the estimated impact to recipients' total rates, go to Appendix D.

C. Findings conclusion

The findings in this fiscal impact study estimate a 3 percent increase is the total statewide impact of DWRS implementation on home and community-based service rates. This impact will occur in calendar year 2019 or 2020, when banding protections no longer are applicable and the system is fully implemented.

This study also illustrates that the projected impact of DWRS to the rates of specific services, lead agencies, providers and recipients varies widely. Some show large increases while others show large decreases. While it is anticipated that moving from a variable county-negotiated rate system to a systematic statewide methodology will result in different rates, DHS is committed to ensure that the cost components within the frameworks accurately reflect the cost of providing services. This report will further highlight this research and give recommendations to change specific cost components according to research on provider costs.

V. Inflation adjustments

CMS requires states to clearly describe the rate methodologies for services (including the data and inputs used to establish rate methodologies) when states complete the 1915(c) home and community-based services waiver application. Adjusting for inflation ensures that service rates keep pace with changing costs over time.

A. Historic methods of adjusting for inflation

Under historic negotiated rate-setting methods, rates were adjusted for inflation through legislatively approved cost-of-living adjustments. Each adjustment required legislative approval, and each resulted in a percentage increase applied to service rates in the system.

There have been three cost-of-living adjustments approved by the legislature after the implementation of DWRS. They account for an increase of approximately 7 percent. These adjustments were applied as after-model adjustments to all rates, regardless of banding.

B. Adjusting for inflation under DWRS

Under the new rate structure, DWRS statute requires two separate inflationary adjustments to occur in the rate setting frameworks in July 2017 and every five years thereafter. Rate frameworks consist of wage components and non-wage cost components such as:

- Employer-paid taxes
- Benefits
- Paid time off
- Administrative costs.

Wage values must be changed according to updated Minnesota-based Bureau of Labor Statistics (BLS) wage data. Non-wage cost components must be modified according to changes in the national Consumer Price Index (CPI).

The impact of July 2017 inflation adjustments to framework rates will be the amount that BLS and CPI updates exceed cost-of-living adjustments already applied to rates. The combined impact of the previously approved cost-of-living adjustments and the BLS and CPI inflation adjustments is expected to result in an increase of 11 percent when banding protections no longer apply.

C. Application of DWRS inflation adjustments

Statute requires inflation adjustments to be applied to both wage components and non-wage components. Due to the calculation formulas in the DWRS, when both the BLS and CPI adjustments are done in conjunction, most non-wage cost components in the frameworks increase beyond the rate of inflation. The majority of non-wage cost components required to be updated according to CPI are defined as percentages of the direct care staff wage. Because they are applied not as additive factors but as multiplicative factors to the wage value, the total dollar amount compensated for each cost is increasing according to the percent increase in the staff wage *and* an increase in the CPI. The result of this is the cumulative dollar impact of applying both adjustments exceeds the rate of inflation for most cost factors in the formula.

For example, within the rate calculation, the cost component for employer-paid taxes is a percentage applied to the wage value. Inflationary adjustments specified under current law result in the dollar value compensated to the provider for employer paid taxes to increase by the percentage that the wage increases in the BLS. In addition, the dollar value compensated to the provider for employer-paid taxes will increase further by the percentage that the national CPI increases. Applying both adjustments would result in the rate over-compensating for employer-paid taxes.

Ensuring that cost components appropriately reflect the cost to provide services over time is a requirement of CMS as well as vital to the accessibility of services across the state. Recommendations to align inflation adjustments with the appropriate inflation-related changes in costs over time can be found in the recommendations section of this report.

VI. Data gathering

Legislation requires DHS (within available resources) to conduct preliminary research and gather data from sources within and outside the state system on the following items:

- Differences in the underlying cost to provide services and care across the state
- Mileage, vehicle type, lift requirements, incidents of individual and shared rides, and units of transportation for all day services (which must be collected from providers using the rate management worksheet and entered into the Rates Management System)
- The distinct underlying costs for services provided by a license holder certified under section 245D.05, 245D.06, 245D.07, 245D.071, 245D.081, and 245D.09, and for all services provided by a license holder certified under section 245D.33.

This section summarizes research completed and applicable ongoing research projects in these subject areas.

A. Regional differences in provider costs

Minn. Stat. §256B.4914 requires DHS to:

- Research the cost differences across the state to provide home and community based services
- Implement a regional adjustment factor at the end of each rate calculation.

DHS commissioned an independent health research firm, Truven Health Analytics, to conduct a study on the differences in the cost of providing services throughout the state and to use those findings to develop an appropriate regional variance factor to apply to rate calculations. The following findings are the results of the study completed in 2015. Regional variance factors were implemented in DWRS frameworks as a result of this study in January 2016. We recommend that the state repeats this study over time in order to appropriately capture changes in Minnesota's labor markets.

Study findings

The study found that staff wages (the predominant cost in providing disability waiver services) did have statically significant variation across the state. Researchers developed regional variance factors from this data. The Rate Management System applied those factors to the DWRS calculations on a rolling basis as service agreements were renewed beginning Jan. 1, 2016. Go to Appendix E for the regional variance factor values.

Region defined

The study used Metropolitan Statistical Areas (MSAs) to define regions. The federal Office of Management and Budget determines MSAs using labor market measures. In order to be included in an MSA, a county adjacent to a core county must either have:

- At least 25 percent of its workers living in the county, but working in the central core county
- At least 25 percent of the employees working in that county reside in the central core county.

This study used the MSA designations from the federal Office of Management and Budget, which were published at the time of the study methodology development, in early 2014. MSA designations may change over time depending on federal decennial census results. Go to Appendix F for the composition of Minnesota's 12 MSAs used in this this study.

Data used

Cost drivers within the DWRS frameworks (which have rationale to support statistically significant cost variation by region) were identified for study. For each cost factor, researchers conducted a review of all available data. In order to be included in the study, the cost factor had to have sufficient, reliable and credible data available to study a meaningful regional variation in cost. For instance, the available data must:

- Sufficiently cover the whole state
- Be reliable so that any future study would be able to replicate the results
- Come from an independent, credible source.

Wage data (available through Bureau of Labor Statistics) was the only cost factor within the DWRS frameworks that had available data to meet this criteria.

Currently, DWRS frameworks are based on statewide median wages measured by the applicable BLS wage codes. Researchers studied these particular wage codes across the MSA regions and compared them to the statewide median. This study concluded that there are areas in the state that have significantly higher wages than the statewide median as well as areas in the state that have significantly lower wages. Using these findings in combination with MMIS historical spending data, researchers developed regional variance factors that were budget neutral on a statewide level.

Stakeholder engagement

Throughout the research process, DHS and Truven Health Analytics engaged with stakeholders on the research methodology, study findings and implementation options. Specifically, Truven Health Analytics presented the research methodology to the DWRS Advisory Committee. It also presented its findings to this group when the research was complete. DHS publically posted the research findings and hosted a public comment period before developing an implementation resolution.

Impact assessment

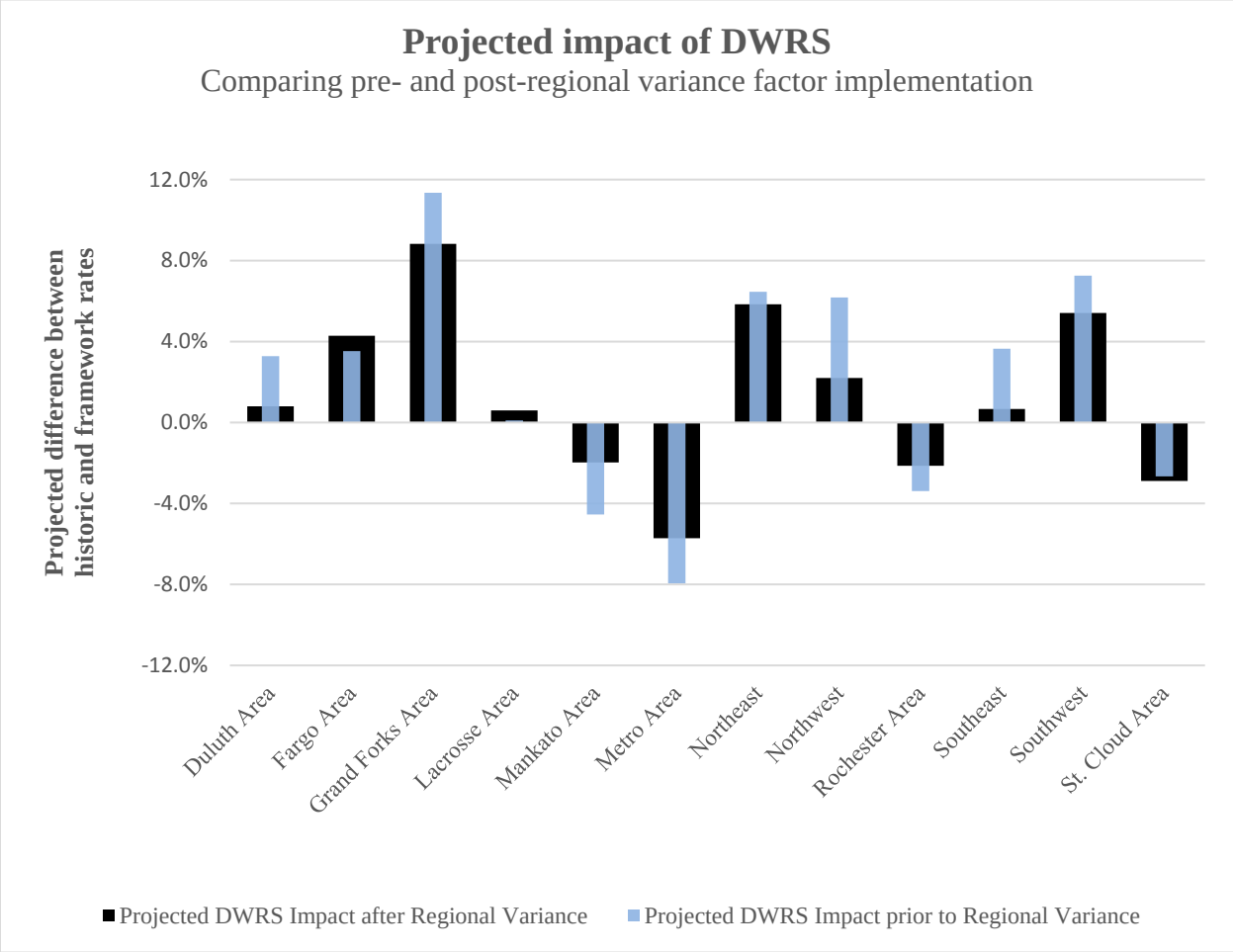
Following the development of the regional variance factors, DHS completed an assessment of the projected impact. According to statute, the regional variance factors must be applied to the end of the framework calculations. The impact assessment compared the projected impact of DWRS to rates (percent difference between the average rate per unit in 2013 and the framework rate calculated by the DWRS) to the projected impact of DWRS to rates with the regional variance factors applied.

The impact assessment found that applying the regional variance factors to the framework rates would not result in decreased spending. In most regions where a negative regional variance factor would be applied, they currently project large increases when full DWRS implementation occurs. Implementing the regional factors will result in smaller increases for these regions.

Additionally, not implementing a regional variance factor likely would have a negative impact in areas where staff wages significantly are higher than the statewide median.

Figure 6 illustrates the regional variance impact assessment for each region, comparing the projected DWRS impact to rates with regional variance factors applied to the projected DWRS impact to rates without regional variance factors applied.

Figure 6: Comparing the projected impact of DWRS pre- and post-regional variance factor implementation



Future adaptation

DHS will replicate this study in conjunction with the statutory requirements to update BLS wage values in 2017, and every five years thereafter. Replication of this research will consider any changes to the regional wage values as well as any changes to the MSA regions defined by the U.S. Office of Management and Budget.

B. Transportation for day services

Legislation requires DHS to collect data on the miles traveled, time spent and type of ride for transportation provided by day service providers. After one year of data collection, DHS reviewed data with the following research objectives:

- Determine the cost difference between historical methods of pricing transportation and the pricing structure in 256B.4914 for daily day training and habilitation services (DTH)
- Examine trends in transportation utilization and price.

This study was completed in 2015. The results were used to implement transportation values for daily day training and habilitation rate calculations in January 2016.

Data used

This analysis reviewed all approved service agreement lines with start dates in fiscal year 2015 that had a matching record in the Rate Management System. This included a total of 8,342 recipients and 261 providers. The following sections summarize the findings on transportation utilization and price.

Utilization

The average miles a person traveled per day as part of their daily-unit day training and habilitation service was 18 miles. The average time a person spent in transit per day was 58 minutes. Regionally, these numbers had wide variability. People in the metro area had the longest average time spent in transit, at 70 minutes. Whereas, other large regions in rural areas, such as the Northwest, Southeast and Southwest regions, all averaged 44 to 45 minutes.

Price

The average historical price of transportation was $11.50 per day, per person. The average new price of transportation is $14.48 per day, per person. All regions, as defined by the Metropolitan Statistical Areas (MSA), would see an increase in their DTH daily transportation spending upon moving from historical pricing methods to the new pricing structure.

Approximately 86 percent of providers across the state would see an increase in DTH daily transportation spending. Statewide, this analysis found that framework rate spending for daily DTH is approximately 5 percent higher with the new pricing methodology compared to framework rate spending utilizing historical transportation pricing.

2016 implementation of DTH daily transportation

In the initial years of DWRS implementation, DHS and stakeholders agreed to delay the DTH daily transportation pricing methodology, outlined in Minn. Stat 256B.4914 subd. 7, 16-17, pending the collection and analysis of this data.

After the review of the findings outlined above, the new transportation pricing methodology was implemented on a rolling basis beginning Jan. 1, 2016. This change only applied to framework rates, or the rate that will be applicable when banding no longer applies.

Future research and adaptation

DHS will continue to research transportation in day services, particularly trends in the utilization and time spent in transit. Transportation is a critical issue that affects people's ability to gain access to the services they need. Future research also may include developing a transportation framework for other services.

C. DHS licensing costs

Legislation requires DHS to study the distinct underlying costs for services provided by a license holder certified under section 245D.05, 245D.06, 245D.07, 245D.071, 245D.081, and 245D.09, and for all services provided by a license holder certified under section 245D.33

These costs include training costs, staff time, licensing fees and administrative tasks. We reviewed these cost components through the non-wage cost component study section in this report.

VII. Payment values

Legislation requires DHS to conduct a preliminary review or evaluation of the following payment values for services in the DWRS. In some instances, we included an analysis plan for future reporting as well.

A. Values for transportation rates for day services

DHS evaluated transportation rates as required by Minn. Stat. §256B.4914, subd. 10b. This research is available in the transportation for day services section of this report.

B. Values for transportation rates in residential services

Transportation costs for residential services are included in the service framework rate. The rate is based on the resident with the highest need and is priced as follows:

- No transportation required: $0/person
- Transportation without a customized adapted vehicle required for all residents: $1,600/person annually
- Transportation in an adapted vehicle with a lift required for one or more residents: $3,000/person annually.

You can find this research in the non-wage cost component study section in this report.

C. Values for services where monitoring technology replaces staff time

Minnesota defines monitoring technology as the use of technology and equipment for providing oversight, monitoring and supervision of individual health and safety while also supporting independence. Monitoring technology equipment includes tools such as alarms, sensors, remote monitors and other devices. The goals for using monitoring technology are to:

- Promote community living
- Promote independence
- Ensure the health and welfare of people with disabilities.

Lead agencies may authorize remote staffing in corporate and family foster care and supported living services (SLS) as part of the DWRS frameworks. For daily SLS and foster care rates calculated in the Rate Management System rates in fiscal year 2016, 1.3 percent of recipients had some remote monitoring units authorized. Of those recipients, 94 percent live in a corporate setting while 6 percent live in a family setting. Of those with remote monitoring, the average number of remote monitoring units per day was 5.5 hours.

D. Values for indirect services

With a few exceptions, only direct (or recipient-facing) time is billable. The program plan support value within the DWRS frameworks accounts for the time spent by direct-service staff when they are not directly engaged with service recipients. Navigant Consulting Inc., developed the cost component for the program plan support value from findings collected through the 2010

RSMI Provider Cost and Wage Survey. Updated research on this component value is available in the non-wage cost component study section of this report.

E. Values for nursing

Lead agencies may enter nursing information in the Rate Management System for direct care by a registered nurse (RN) or a licensed practical nurse (LPN) in day and residential services. This section will analyze the average utilization and cost of RN and LPN inputs in day and residential services.

Residential services

Approximately 25 percent of recipients of daily foster care and supportive living services (SLS) have some hours for RN or LPN nursing accounted in their framework calculation. Corporate adult foster care has the highest occurrence at 30 percent of people. SLS adult family has the lowest at 4 percent. For service recipients with nursing hours, the average amount of time of LPN or RN direct care incorporated into the foster care or SLS rate is 28 minutes per day.

Table 5 displays the distribution of these statistics by service.

Table 5: Nursing in foster care and daily SLS services

Service	Percent of recipients with RN or LPN	For people with nursing, average time of RN or LPN in a daily unit
Foster care, adult, corporate	30%	33 minutes
Foster care, adult, family	8%	87 minutes
Foster care, child, corporate	21%	73 minutes
Foster care, child, family	5%	60 minutes
SLS, adult, family	4%	38 minutes
SLS, adult, corporate	25%	23 minutes
SLS, child, family	22%	117 minutes
SLS, child, corporate	29%	21 minutes
Total (SLS & foster care)	**25%**	**28 minutes**

Before BLS updates (set to occur in July 2017), the average price for one hour of nursing within the framework (including the nursing wage and all proceeding factors applied) depended on the residential setting due to the compounding factors. The cost for one hour of LPN staffing within the framework is approximately $28.60 in family settings and $31.87 in corporate settings. The cost for one hour of RN staffing is approximately $47.29 in family settings and $52.70 in corporate settings. This does not include the regional variance factor that will depend on the person's county of residence.

Day services

Approximately 2 percent of recipients of day services have some hours for RN or LPN nursing accounted in their framework calculation. The service category with the highest occurrence is adult day services with 13 percent of people receiving some nursing. Before BLS updates (set to occur in July 2017), the approximate cost of nursing in the day services frameworks is $61.29 for one hour of RN direct care and $37.07 for one hour of LPN direct care. This does not include the

regional variance factor that will depend on the person's county of residence. Due to the varying unit levels within the day service bucket, the average amount of nursing time varies by service.

Table 6 displays the distribution of these statistics by service:

Table 6: Nursing in day services

Service	Percent of recipients with RN or LPN	For people with nursing hours, average time of RN or LPN
Adult day care	12.3%	
15 minutes	15/6%	24 minutes per 15 minute unit
Daily	9.8%	15.6 minutes/day
DT&H/structured day	0.7%	
15 minutes	0.6%	66 minutes per 15 minute unit
Daily	0.7%	22.8 minutes/day
Prevocational services	0.5%	
Daily	0.5%	16.8 minutes/day
Hourly	0.5%	10.5minutes/hour of service
Grand total	**2.1%**	

F. Component values for independent living skills

Independent living skills training is defined as direct training from a staff person to address identified skill development needs of a person in the areas of:

- Communication skills
- Community living and mobility
- Interpersonal skill
- Reduction or elimination of maladaptive behavior
- Self-care
- Sensory or motor development involved in acquiring functional skills.

Analysis on the costs associated with providing independent living skills, particularly indirect time, absence, transportation and training costs is in the non-wage cost component study section of this report.

G. Component values for family foster care that reflect licensing requirements

Licensing requirements enacted Jan. 1, 2014 (because of the new 245D law) may require some family-foster care providers and staff to complete a level of training that was not required before 2014. This change was part of a DHS initiative to establish health and safety standards across all of the home and community-based services.

Component values for corporate foster care and family foster care differ in two ways:

- The first difference is in the general administrative support ratio (13.25 percent in corporate versus 3.3 percent in family foster care). Family foster care providers typically

provide this service in their own home, and therefore, generally do not incur the administrative costs typically associated with providers that operate on a larger scale, and/or perhaps in a separate location. As such, they generally would not incur the costs associated with administrative functions (i.e. human resources, accounting, office supplies and equipment maintenance and facilities management).

- The second difference is in the absence factor (3.9 percent in corporate, which includes a utilization factor, versus. 1.7 percent in family foster care, which does not include a utilization factor). Family foster care providers typically provide this service in their own home, and therefore generally do not incur additional costs that other providers incur to maintain a licensed capacity associated with the utilization factor.

Training is included in the program-related expense ratio within the framework (1.3 percent). The training component value is the same in corporate foster care.

Additional analysis on all non-wage costs within family foster care services is in the non-wage cost component study of this report.

H. Adjustments to other components to replace the budget neutrality factor

Under current statute, each framework rate calculation in DWRS has an after model adjustment called the budget neutrality factor. The framework rate generated by DWRS is multiplied by the following factors:

- For residential services: 1.003
- For day services: 1.000
- For unit-based services with programming: 0.941
- For unit-based services without programming: 0.796.

Budget neutrality factors are the only components in DWRS rate statute that do not reflect a providers' costs required to provide the service. The purpose of this factor was to ensure that the aggregate level of spending during the banding years remains comparable to historic spending. Applying these factors to framework calculations, however, results in rates that do not reflect the true cost of services.

As a component of the corrective action plan with CMS, these factors must be removed from framework calculations by Dec. 31, 2018. Recommendations on adjustments to cost components in conjunction with the removal of budget neutrality factors are in the recommendations section of this report.

I. Remote monitoring technology for nonresidential services

Currently, lead agencies only may authorize remotely monitored-service hours within RMS for corporate and family foster care or supported living services, all of which are residential services.

Monitoring technology is an emerging practice in home and community-based services, and practices across the state vary widely. The use of remote monitoring within additional rate frameworks is a future possibility. However, the provision of remote services and service

standards must be within CMS-approved guidelines. As future remote services emerge, DHS will work with stakeholders throughout the rate-setting process.

J. Values for basic and intensive services in residential services

An intensive workgroup of provider and lead agency stakeholders developed the DWRS during four years of meetings. This workgroup defined the cost drivers for each service.

This group determined that staff with greater skills is required to deliver services that include training, habilitation and rehabilitation. The group also determined that more skilled staff receives higher wages than similar staff in the industry that deliver care but are not required to

- Understand learning styles
- Implement a training plan
- Measure success.

For this reason, during legislative negotiations in 2013, DHS initially proposed two tiers of residential services:

- An intensive level for training services
- A basic level for maintenance services.

There was concern during 2013 legislative negotiations that implementation of two tiers would be a burden administratively. DHS agreed to collapse the two tiers until more research could be conducted.

The exceptions research study looked at identifying specific recipient characteristics that would require increased levels of staffing and/or exceptions. However, there was no statistically significant findings to substantiate tiers or customization of rates based on currently available data on recipient need. Those findings can be found in the exceptions research section of this report.

Currently, intensive service needs are accommodated through increased individual staffing levels and increased staff training requirements are accommodated through the rate exception process.

K. Values and weightings for the facility use rate in day services

Facility-use rate

The facility-use rate in DWRS is considered to be an interim component within the frameworks for day services. This component value was determined using a combination of a rate recommended in the Navigant report and information gathered from stakeholders. The two primary data sources for this component value were:

1. An average cost of $8.30 per person, per week to rent existing appropriate space in Minneapolis
2. The cost of $8.24 per person, per week for new construction for a day care center in Minneapolis.

The Navigant report recommended use of the higher of these two values. DHS accepted this recommendation.

During legislative negotiations in 2013, DHS and stakeholders compromised to reach the current value of $19.30 per person, per week.

CMS issued new rules in January 2014, which required each state to create a transition plan to achieve compliance with requirements by March 17, 2019. This rule limits the community-based service dollars spent on facility settings until the assessment phase of the transition plan is completed. Updated research on this cost component is in the non-wage cost component study section of this report.

Staff ratio weightings

In the day service bucket, indirect time is accounted for through two components:

- Staffing ratio weightings
- Program plan support component value.

In the non-wage component value study, Truven Health Analytics found that in the day bucket, the average percent of staff time doing indirect tasks was 16 percent. However, Truven was unable to convert this data into a definitive recommendation on the program plan support value because the costs of indirect time are also compensated through the weightings behind staffing ratios.

This analysis looks at the aggregate amount of indirect time covered in the staffing ratio weightings and the program plan support value. It compares the current amount compensated to Truven's research findings of 16 percent.

Background: Staff-ratio weightings

The staff-ratio weightings were incorporated into the day frameworks in order to account for the non-client facing direct care staff time required in order to serve people, particularly at higher staff ratios. It was understood that the total costs of indirect time (including the time for documentation and service planning) was greater when a provider served 10 people at a 1:10 ratio than when serving one person at a 1:1 ratio. Therefore weighted ratio factors were incorporated to the wage component rather than using a straight-staffing ratio (for example, the weighted ratio factor divides the wages by 1.825 rather than by 2 for a 1:2 ratio). These factors are shown in Table 7.

Background: Program plan support value

In addition to these weightings, the frameworks currently also include a program plan support value of 5.6 percent for all staffing ratios to also cover indirect time costs.

What percentage of indirect time is built in the frameworks through staffing-ratio weighting?

Table 7 illustrates the following for each ratio:

- The current weighted ratio factor
- What the proportional ratio factor would be without weightings
- The total wage cost with the weighting factor applied
- The total wage cost if weightings were not used

- The resulting percentage increase built into the rate as a result of the staff-ratio weightings.

Table 7: Amount of indirect time accounted for through staff-ratio weightings

Staff ratio	Current weighted ratio devisor	Proportional ratio devisor	Total direct care staff wages with weightings	Total direct care staff wages if weightings were not used	Percent increase built in from enhanced ratios
1:1	1.00	1.00	$79.98	$79.98	0.0%
1:2	1.83	2.00	$43.83	$39.99	9.6%
1:3	2.52	3.00	$31.75	$26.66	19.1%
1:4	3.12	4.00	$25.67	$20.00	28.4%
1:5	3.62	5.00	$22.07	$16.00	38.0%
1:6	4.07	6.00	$19.68	$13.33	47.6%
1:7	4.46	7.00	$17.92	$11.43	56.8%
1:8	4.81	8.00	$16.64	$10.00	66.4%
1:9	5.10	9.00	$15.68	$8.89	76.4%
1:10	5.38	10.00	$14.88	$8.00	86.0%

What percentage of indirect time is built in the frameworks through the program plan support value?

All service rates in the day bucket include an additional 5.6 percent for indirect time through the program plan support component value.

How does current compensation for indirect time compare to Truven's findings?

When comparing Truven's indirect time findings to the current combination of the Program Plan Support value and staff-ratio weightings, most staff ratios currently account for indirect time at a higher value.

Through their survey, Truven found that the average amount of direct care staff time spent doing indirect tasks was 16 percent of their total time. Our analysis on the staff-ratio weightings found that for all ratios greater than 1:2, the percentage increase built into the staffing ratio weightings is greater than 16 percent. The average staffing ratio (1:4) has a factor of 28 percent built in from the staff ratio weightings.

L. Employee-related expenses

The current methodology for all DWRS frameworks includes 11.56 percent for payroll taxes, unemployment insurance and workers compensation. This percentage includes the following employer costs:

- 6.20 percent for Social Security payroll taxes
- 1.45 percent for Medicare payroll taxes
- 2.41 percent for unemployment insurance
- 1.5 percent for workers' compensation.

For analysis on these factors, review the non-wage cost component study section of this report.

M. Group residential housing rate 3 costs

This section relates to analysis of costs associated with people with rates previously adjusted for the inclusion of group residential housing (GRH) rate 3 costs.

Before Dec. 1, 2004, a GRH supplemental rate was available for people with disabilities who lived in foster care-licensed settings. This rate, commonly referred to as "GRH rate 3," was a supplement to the base-group residential housing payment. It was available for people who had limited income and assets while they lived in a licensed foster care setting. The amount was negotiated between the lead agency and the licensed setting within the cap amount available. It required DHS approval.

The majority of GRH rate 3 payments went to providers who provided home and community-based waiver services (usually through the Developmental Disabilities (DD) or Community Alternatives Care (CAC) waivers). GRH rate 3 payments ended Dec. 1, 2004. At DHS direction, lead agencies negotiated increases (also effective Dec. 1, 2004) to home and community-based waiver rates to offset the loss of GRH rate 3.

Between Dec. 1, 2004, and the implementation of the statewide DWRS on Jan. 1, 2014, lead agencies negotiated residential service rates with providers without statewide oversight. Some lead agencies simply carried their historically negotiated GRH rate 3 agreements forward as part of the provider's contract rate. There was not a consistent approach to account for provider costs as previously captured under the GRH rate 3.

Some provider agencies are concerned that DWRS implementation will shift funds inappropriately between agencies, thus reducing rates for providers whose lead agency-negotiated rates were based, in part, on historic GRH rate 3 agreements and thereby increasing rates for other providers.

Capturing historic GRH rate 3 agreements within the DWRS will be difficult for several reasons:

- First, no reliable data source exists for the historic GRH rate 3 agreements that ended more than 10 years ago.
- Second, the intention of a statewide rate system, and our specific direction from CMS, is to replace county negotiated rates with a consistent statewide system of establishing rates.

Carrying forward the historic GRH rate 3 amounts that lead agencies and providers negotiated contradicts the intention of the DWRS and direction from CMS.

N. Law changes that impact cost to provide HCBS services

This section relates to the analysis of state and federal law changes that may have an impact on the underlying cost of providing home and community-based services.

DHS will assess and research the impact of any new state or federal laws that could have a statistically significant impact on the cost of providing disability waiver services. DHS will conduct the following research process:

1. **Identify and complete initial assessment.** We will identify and assess state and federal law changes that could have an impact on the cost of providing services. We will then determine if the change meets at least one of the following criteria:

    - Is there rationale and evidence that the particular law change has a *direct* and *significant* impact on specific component values within the DWRS frameworks?
    - Is there rationale and evidence that the particular law change introduces a new cost driver to providing waiver services that current component values do not reflect within the DWRS frameworks?

    Under this research plan, DHS will not study state and federal laws that do not meet these criteria.

2. **Develop research plan.** For new laws that meet at least one of the criteria in step one, DHS will develop a comprehensive research plan. The research plan will specify the study's research questions, data resources and research methodology.

3. **Conduct research**. Depending on the research methodology, DHS will obtain data or develop a data model. We will conduct research on the requirements of the new law and its impact on the cost to provide waiver services.

4. **Review findings**. DHS will review the research and discuss recommendations with stakeholders.

VIII. Approved rate exceptions

The DWRS was developed after a complex review of the costs associated with providing disability waiver services. While the DWRS frameworks are designed to cover the cost of serving most recipients, DHS anticipates that some recipients with exceptionally high needs will require a DHS-approved rate exception. Rate exception eligibility and processes are outlined in Minn. Stat. §256B.4914, subd. 14.

Due to banding protections, which limit the financial impact to rates for ongoing recipients and providers, rate exceptions during the banding period are limited. Below is a summary of the exceptions received by DHS during calendar year 2015.

A. Summary of 2016 rate exceptions

As of Sept. 30, 2016, DHS received 628 exception requests from 69 lead agencies. Of all the requests received, DHS approved 499. Eight currently are pending and 85 were withdrawn because either they did not meet the basic statutory qualifications or the lead agency was able to meet the person's needs through additional units of service in DWRS.

Out of the approved exceptions in 2016:

- 52 percent were for residential services
- 35 percent were for day services
- 7 percent were for unit-based services without programming
- 6 percent were for unit-based services with programming.

Thirty four exception requests were denied.

Out of the denied exceptions in 2016:

- 18 were ineligible
- 3 requests were not based on the person's extraordinary needs
- 7 were not based on cost drivers
- 6 were requested for people whom lead agencies determined that they did not have extraordinary needs.

DHS makes every effort to work with lead agencies and providers to identify if a person is eligible for an exception. However, for DHS to approve an exception request, the person must be in need of an exception and the appropriate cost drivers must be specified and matched to the extraordinary need. If cost drivers do not appropriately match the extraordinary needs of the person, DHS will consult with the lead agency. If the lead agency fails to withdraw the request, DHS will deny the exception request.

For a list of frequently asked questions regarding the exceptions process, see Appendix G.

IX. DWRS rate exception research

Minn. Stat. §256B.4913 protects most recipients and providers with banding provisions. As such, there are few people right now who both are subject to full framework rates and also need a rate-exception approval. Therefore, to accurately estimate the total fiscal impact of DWRS, we need a projection of rate exceptions.

DHS commissioned an independent research firm, The Improve Group, to gather data and project the number of rate exceptions that will be granted when banding protections no longer are applicable. In addition to estimating the fiscal impact of rate exceptions to the HCBS waiver programs, the research study identified patterns in cost drivers, population characteristics and services.

This study was completed in 2015 before the required rate adjustments (according to BLS and CPI updates).

A. Analysis methodology

Due to the limited number people with rate exceptions in 2015, there is insufficient data to estimate the financial impact of exceptions when banding restrictions are lifted. Therefore, this analysis created a new data set using a stratified random sample, based on service groupings of current wavier recipients in a cohort of lead agencies. That cohort was selected to be representative of the lead agencies throughout the state using criteria based on size, region, the presence of a county alliance and the presence of a tribe. The sample size included 6,907 waiver recipients and 1,077 providers.

B. Data collection

Each provider in the study received a list of service recipients who were selected for the study. For each recipient and service, researchers asked the provider to make a judgement as to whether it would request a rate exception if banding protections were lifted. If yes, the provider was asked to submit additional exception request documentation. Lead agencies reviewed the data next, and each indicated whether it would approve or deny each request. Lastly, DHS reviewed all of the exceptions to determine whether the state would grant the exception. This data formed the basis for the fiscal analysis on DWRS rate exceptions.

From the 6,907 sample claims, providers submitted 1,104 rate exception applications. Of those applications, the final data set included 361 approved exceptions. All service groupings, unless noted, have a sample size that meets or exceeds a confidence level of 95 percent.

C. Measures

From the collected data set, the analysis used the following measures to calculate fiscal impact:

- **Rate of approved exceptions**: The percentage of recipients in the total sample approved to receive a rate exception.
- **Average percent increase:** The average difference between the framework rate and approved exception rate for people approved to receive a rate exception.

Table 8 displays these two measures for the service groups in this study:

Table 8: DWRS rate exception measures, by service grouping

	Study service group	Total sample size	Rate of approved exceptions	Average percent increase over framework rate
1	Day services – day training & habilitation	1,233	7%	82%
2	Day services – other	759	4%	82%
3	Residential services – customized living & residential care services	614	3%	19%
4	Residential services – foster care & supportive living services, corporate	1,537	7%	29%
5	Residential services – foster care & supportive living services, family	264	2%	53%
6	Unit services – independent living skills	798	11%	59%
7	Unit services – respite care services	517	2%	69%
8	Unit services – personal support	308	1%	11%
9	Unit services - other	877	2%	31%
	Total	**6,907**	**5%**	**54%**

NOTE: Low survey response rate resulted in a confidence level of 90 percent for these the "residential services – foster care & supportive living services, family" and "Unit services – personal support" service groupings.

D. Fiscal impact findings

This analysis estimated the statewide cost of exceptions by applying the rate of approval and the percent cost increase to 2014 calendar year spending in each service group. Across all service groups, the total statewide projected spending on exceptions accounted for approximately 2.22 percent of total DWRS spending in 2014 dollars.

Applied to the fiscal year 2020 forecast for DWRS spending, the total dollar amount projected for exception spending is $58,789,761 million per year (state and federal spending combined). This is the total amount projected to be spent in addition to framework rate spending for people with rate exceptions. Given the limitations of this study (detailed in the study limitations section later in this report), this projection is considered as a minimum estimate.

The service groups with the largest projected financial impact of rate exceptions, in total dollars, are:

- Corporate foster care
- Supportive living services
- Day training and habilitation services.

The service groups with the largest projected prevalence of exceptions, as measured by the percentage of the total service spending, is:

- Independent living services, 6.2 percent

- Day training and habilitation services, 6 percent
- Adult day and prevocational service, 3 percent.

On a larger service bucket level, the day bucket is projected to have the largest exception cost as a percentage of the total bucket spending, while the unit-based services without programming bucket is expected to have the lowest. Table 9 illustrates the findings by service bucket:

Table 9: Projected exceptions cost by service bucket

Service bucket	Projected exceptions cost as a percentage of total spending
Residential	1.73%
Day	5.45%
Unit with programming	2.84%
Unit without programming	0.52%

E. Primary cost drivers

Lead agency and DHS review of the rate exception requests submitted by providers ensured the following three criteria were met:

- Evidence of the person's needs
- Explanation of the providers' response to the person's needs
- An explanation of how framework cost components are higher due to the provider providing services to meet the person's needs.

The application asked providers to select the reason why they requested the exception. Providers could choose one or more of the following reasons:

- Competent provision of care requires specialized providers standards
- Discharge
- Extraordinary cost driver exceeds assumption in frameworks
- Other cost driver not recognized in the frameworks.

Many applications had more than one reason selected.

As shown in Table 10 below, more than 50 percent of submissions had "extraordinary cost driver," "other cost driver" and "specialized provider standards" as the reasons for the exception request. Discharge was significantly lower and present in only 8 percent of submissions.

Table 10: Cost drivers cited in exceptions request applications

Exception request reason	Number of approved applications with that reason	Percent of approved applications with that reason	Number of total applications with that reason	Percent of total applications with that reason
Extraordinary cost driver exceeds assumption in frameworks	257	71.2%	702	63.6%
Other cost driver not recognized in the frameworks	214	59.3%	661	59.9%
Competent provision of care requires specialized provider standards	195	54.0%	596	54.0%
Discharge	23	6.4%	90	8.2%

More than 70 percent of the approved applications listed "extraordinary cost driver" as one of the reasons for the request. When providers selected that reason, they could select one to four specific cost drivers that exceeded the assumption within the frameworks, including:

- Liability insurance
- Staff turnover
- Physical plant
- Wage differential.

As shown in Table 11, providers selected wage differential on 63 percent of approved applications and on more than 51 percent of the total applications.

Table 11: Breakdown of extraordinary cost drivers in applications

Extraordinary cost driver	Number of approved applications with that reason	Percent of approved applications with that reason	Number of total applications with that reason	Percent of total applications with that reason
Wage differential	228	63.2%	562	50.9%
Staff turnover	88	24.4%	325	29.4%
Physical plant	84	23.3%	176	15.9%
Liability insurance	13	3.6%	94	8.5%

When they selected "other cost driver," providers could write-in a specific cost driver that they believed the framework did not recognize. The most common submissions on approved applications wereabout:

- Recipient absences and lack of service utilizations
- Excessive travel or transportation costs
- Costs pertaining to administration or other business related factors
- Training for staff.

Table 12 shows the most frequently listed cost drivers in the "other" category.

Table 12: Breakdown of "other cost drivers"

Other cost driver	Number of approved applications with that reason	Percent of approved applications with that reason	Number of total applications with that reason	Percent of total applications with that reason
Absences/utilization	20	5.5%	25	2.3%
Travel/transportation	20	5.5%	89	8.1%
Business cost	19	5.3%	53	4.8%
Training	13	3.6%	33	3.0%

F. Overall cost driver findings

In addition to the cost-driver reasoning indicated in the exception application selections, providers also had to submit a qualitative summary about the:

- Needs of the person
- Service response to the person's needs
- Resulting increase to specific cost drivers.

Analysis of these summaries along with the data above found the following cost drivers as the most frequently cited reasons for needing for a rate exception:

- **Staff wages:** It is a challenge for service providers who serve people with high needs to attract and retain qualified staff due the low wages relative to the demands of the work (e.g., risk of injury, unpredictable hours, etc.). Staff that serve people with specific needs often require training and additional qualifications, which require higher wages.
- **Specialized training:** People with unique needs require specialized knowledge and training of staff. This requires additional staff time and provider resources.
- **Absence/utilization:** Recipients with large numbers of absences can be a significant cost to the provider, as they cannot bill for the service but still pay for staffing and overhead costs.
- **Scarcity of services/service providers:** Rural areas of Minnesota have a limited number of providers and staff to serve the wide range of needs across the waiver programs. Additionally, transportation costs may be higher in rural areas for recipients with specialized needs, as they need to travel to receive services due to lack of options closer to home.

G. Primary characteristics of people who require rate exceptions

To identify the characteristics that influence whether a specific exception request would be approved, a predictive model was created. It used the random forest package in R statistical software. Random forests generate a large number of decision trees to use in developing a predictive model. The factors generated by using random forest modeling more accurately predict the outcome of interest (in this case, an approved exception request) than other statistical methods.

To build a predictive model, the random forest package compares all the variables against each other over hundreds of iterations. The variables listed below were identified as having a high influence on whether an exception request was approved.

This analysis was conducted using all variables found on the DD screening document for recipients on the DD waiver and all variables found on the long-term care document for recipients on the BI, CAC, and CADI waiver programs.

In BI, CAC, and CADI programs, the primary predictors of needing a rate exception included:

- Medication management
- Behavior needs
- Vision needs
- Orientation needs.

Age, mental health status and the number of emergency room visits also were indicators of an approved request.

The primary predictors of rate exceptions for people on the DD waiver program included:

- Age
- Expressive communication
- Behavioral needs
- Mobility needs
- Vision needs.

The DD screening document includes more information on behavioral needs than the long-term care screening, and as such, all of the behavioral needs were identified as predictors of an approved exception request.

Based on the preliminary analysis of exceptions applications and screening data, rate exception requests primarily were based on the recipient's needs. The exception request applications asked providers to give a reason for the request that included the person's specific need for the request. The most common reasons given for approved requests included "aggressive other behaviors" and "specialized medical needs." Complexity of diagnosis also was a factor in a many applications, including recipients with multiple diagnoses and co-occurring conditions.

H. Study limitations

Because the data used in this analysis depended heavily on survey participation and the submission of adequate, detailed information, the calculated statewide fiscal impact is a conservative estimate of the costs associated with exceptions when banding protections are lifted in 2019 or 2020. The estimate should be interpreted as a floor rather than a ceiling.

The study also has the following additional limitations:

- **Response rate:** The number of applications received in each service bucket and lead agency was highly dependent on the willingness and ability of providers to participate in

the research study. Some were reluctant to participate: Family foster care providers in particular expressed concerns about taking part in the study.

- **Lead agency variability:** The lead agencies used in this study were selected to be representative of the types of lead agencies in the state. However, the total number of exceptions and the fiscal impact will depend on the populations served by lead agencies not included in the study.
- **Framework or service changes:** The financial impact estimates do not take into account changes in the services providers offer, scheduled increases to the framework rate or services a person receives. These changes likely will affect the fiscal cost of rate exceptions.
- **Exception process barriers:** This study is a point-in-time estimate centered on current exceptions process and knowledge. If future modifications to the exceptions process are made or there is more familiarity with the process over time, there may be more providers who submit exceptions than were captured in this study.

X. Non-wage component value study

DWRS rate frameworks are comprised of average-cost components required by providers in order to provide the service. These components include wage, business and program expenses. While the wage component costs are based on independent data from the Bureau of Labor Statistics, other cost components primarily are based on a 2009 provider survey.

In 2015 and 2016, DHS completed a study on all non-wage cost components in order to validate previously identified values and, if needed, recommend modifications to values within the frameworks. To ensure rates accurately reflect true costs, DHS commissioned an independent research firm, Truven Health Analytics, to examine non-wage costs within the DWRS frameworks.

In June 2016 Truven released its findings, which included recommendations for changes to cost components within the rate setting formulas. For the full text of the non-wage cost component study, see Appendix H.

XI. Ongoing DWRS evaluation

As the banding period and DWRS implementation continues, DHS will continue ongoing research and analysis to ensure that:

- The DWRS accurately reflects the cost to provide services
- Recipients continue to have access to the services they need
- The system is implemented fairly and consistently throughout the state.

In order to ensure DHS meets these goals, we will continue the following research:

- **DWRS inputs:** The inputs that lead agencies enter in the Rate Management System (e.g., staffing hours) are fundamental to the calculation of rates. DHS is studying the inputs entered into DWRS and identifying outliers and trends.
- **DWRS compliance:** DHS will continue to monitor DWRS compliance for each lead agency to ensure the system is used accurately to calculate rates. DHS will report findings to CMS.
- **Rate exceptions**: DHS will continue to study rate exceptions (including the fiscal cost), trends in service categories, exception reasons and the specific cost drivers that necessitate an approved exception.
- **DWRS impact by recipient:** DHS will further examine DWRS impact by recipient as we research the rate impact of DWRS to specific recipient and waiver populations.
- **Transportation:** DHS will continue to examine transportation use and cost.
- **Component value research:** DHS will study provider costs as they relate to DWRS cost component values at least once every five years.
- **Stakeholder input:** DHS will continue to work with stakeholders on the development, adaptation, and implementation of the DWRS research plan.

XII. Report recommendations

A. Summary

The DWRS was a significant change for the state. The 2013 legislation that created it was careful to allow for a five-year transition plan to fully implement the new system. This process was allowed time to adjust the system and ensure the quality of services was maintained.

The implementation of DWRS was a federal requirement. DHS was under a corrective action plan. To ensure federal compliance going forward (and continued access to waivered services), CMS requires us to:

- Fulfill several elements of the corrective action plan by 2019
- Outline and justify the cost components used to calculate rates
- Re-examine and re-base rates on a five-year basis.

B. Recommendations

This report contains the first system-adjustment recommendations from DHS. The recommended adjustments are based on three years' worth of data, research and analysis. The statute that authorized system implementation requires DHS to complete in-depth analysis to ensure costs accurately reflect rates. Recommendations in this report are based on these analyses.

These changes will help ensure people continue to have access to services that:

- Provide opportunities
- Provide individual choice
- Are integrated in the community.

These recommendations also will ensure ongoing compliance with federal rules.

List of steps

During the remaining three or (pending CMS approval) four years of banding protection, DHS will continue to focus on careful analysis to ensure that:

- Components within the DWRS accurately reflect the cost of providing services
- Recipients continue to have access to the quality services they need
- DWRS is implemented fairly and consistently throughout the state.

To do so, DHS recommends the following changes to DWRS:

- **Adjust component values for unit-based services.** Unit-based services are lower-cost alternatives to facility-based residential and day services, which are more structured and offer less flexibility than unit-based services. An upward adjustment of component values (as recommended by an independent researcher, Truven Health Analytics), will ensure unit-based services are priced appropriately according to the actual costs of providing these services.

- **Remove respite care services from the frameworks and allow them to be purchased at market rates.** Respite services are short-term care services provided due to the absence or need for relief of primary caregivers normally providing care.
  - Respite service was the leading service identified by lead agencies, providers, and people in the long-term services and supports biennial gaps analysis. They reported that it had limited service access across the state.
  - DWRS fiscal analysis found the rate for daily respite to be insufficient for many providers to meet the needs of service recipients. Since the implementation of DWRS, DHS has received a large volume of rate exceptions for respite daily services.
- **Remove after-model budget neutrality factors from rate calculations**. DWRS rate setting frameworks calculate rates based on statewide cost components such as wages, employee benefits, employer-paid taxes, paid time off, indirect staff time and program expenses. Budget neutrality factors, applied at the end of the calculations, are the only framework factors in the rate-setting statute that are not attributed to provider costs. DHS is required to remove these factors by Dec. 31, 2018 according to the Corrective Action Plan approved by CMS.
- **Modify automatic inflationary adjustments, as required by Minn. Stat. §256B.4914, to better reflect the cost of providing services:** Because of the calculation formulas in the DWRS, most rates increase beyond the rate of inflation. Similar adjustments are made to staff wages and cost factors based on the Consumer Price Index. The cumulative dollar impact of applying both adjustments exceeds the rate of inflation for most cost factors in the formula. DHS proposes removing the duplicative factors in the rate formulas to more accurately reflect cost. This proposed change will align with CMS requirements for scheduled rate rebasing.
- **Implement a provider cost audit:** In conjunction with modification of inflationary adjustment, DHS recommends a provider cost audit on a scheduled basis. HCBS providers will submit cost information to us. We will use this information to inform recommendations to the legislature through reporting (which is required on a four-year basis).

C. Conclusion

DHS is committed to continued communication with provider representatives, lead agency representatives and other stakeholders to ensure the DWRS is applied uniformly and the system functions accurately.

Through full implementation of the DWRS, protections exist for recipients, providers, lead agencies and the state. These protections include the rate-stabilization adjustment period, known as banding, as well as the rates exceptions request process for people with needs that may not be met by the rate frameworks. The five-year implementation period with these protections allow DHS to complete complex analysis on the new system and make data-driven changes that will mitigate future, long-term negative impacts.

XIII. Appendix

Appendix A

Table 13: Statewide analysis by service

Service name	Service unit	Percent difference in historic and current framework rates	Percent difference in historic and framework rates after July 2017 BLS and CPI adjustments
Adult day care	15 minutes	11.1%	16.9%
Adult day care	Daily	9.3%	16.9%
Adult day care, bath	15 minutes	-23.3%	-19.3%
Adult day care, fads	15 minutes	4.1%	9.6%
Customized living services, 24-hour	Daily	0.5%	0.5%
Customized living services	Daily	12.1%	12.1%
Behavior support by analyst	15 minutes	-8.1%	-0.3%
Behavior support by professional	15 minutes	-21.8%	-18.6%
Behavior support by specialist	15 minutes	35.1%	47.5%
DT&H/structured day program	15 minutes	6.7%	15.5%
DT&H/structured day program	Daily	-10.0%	-4.3%
DT&H partial day	Partial day	0.8%	0.8%
Foster care, adult, corporate	Daily	-2.6%	0.9%
Foster care, adult, family	Daily	48.4%	52.9%
Foster care, child, family	Daily	13.4%	16.8%
Independent living skills, training, 1:1	15 minutes	-26.4%	-21.1%
In-home family support	15 minutes	0.6%	5.8%
Night supervision	15 minutes	40.9%	45.7%
Personal support/adult companion	15 minutes	17.9%	17.9%
Prevocational services	Daily	-15.2%	-8.2%
Prevocational services	Hourly	-23.2%	-16.8%
Residential care services	Daily	-16.4%	-16.4%
Respite care services, in home	15 minutes	11.9%	11.9%
Respite care services, in home	Daily	11.8%	11.8%
Respite care services, out of home	15 minutes	14.9%	14.9%
Respite care services, out of home	Daily	-7.8%	-7.8%
Supported employment, 1:1 ratio	15 minutes	0.2%	10.0%
Supported employment, 1:2 ratio	15 minutes	-6.7%	2.4%
Supported employment, 1:3 ratio	15 minutes	-22.0%	-14.3%
SLS, adult	15 minutes	-3.5%	6.0%
SLS, adult	Daily	3.3%	6.4%
SLS, adult, corporate	15 minutes	-6.9%	2.2%
SLS, adult, corporate	Daily	1.8%	5.4%
SLS, child	Daily	4.2%	7.3%

Appendix B

Table 14: Lead agency impact analysis by county of residence (COR) and county of financial responsibility (CFR)

Lead agency	Projected percent change to rates for lead agency as COR	Projected percent change to rates for lead agency as CFR
Aitkin	7%	-2%
Anoka	-3%	-4%
Becker	17%	16%
Beltrami	11%	9%
Benton	-5%	-3%
Big Stone	2%	8%
Blue Earth	-3%	5%
Brown	7%	7%
Carlton	2%	8%
Carver	2%	4%
Cass	-4%	-1%
Chippewa	8%	14%
Chisago	8%	8%
Clay	11%	12%
Clearwater	5%	-3%
Cook	0%	-2%
Cottonwood	19%	16%
Crow Wing	4%	8%
Dakota	3%	3%
Dodge	2%	54%
Douglas	8%	4%
Faribault	9%	15%
Fillmore	37%	26%
Freeborn	0%	-1%
Goodhue	-5%	-4%
Grant	2%	33%
Hennepin	-4%	-3%
Houston	8%	4%
Hubbard	-11%	9%
Isanti	0%	8%
Itasca	25%	17%
Jackson	-10%	0%
Kanabec	17%	3%
Kandiyohi	15%	17%
Kittson	29%	-5%

Lead agency	Projected percent change to rates for lead agency as COR	Projected percent change to rates for lead agency as CFR
Koochiching	7%	3%
Lac Qui Parle	9%	10%
Lake	15%	21%
Lake of the Woods	4%	5%
Le Sueur	21%	-9%
Lincoln	-1%	0%
Lyon	4%	6%
Mahnomen	-3%	18%
Marshall	13%	15%
Martin	8%	10%
Mc Leod	5%	7%
Meeker	19%	11%
Mille Lacs	8%	7%
Morrison	4%	13%
Mower	11%	7%
Murray	18%	12%
Nicollet	13%	3%
Nobles	12%	13%
Norman	5%	6%
Olmsted	3%	3%
Otter Tail	4%	8%
Out of State	-5%	-
Pennington	48%	16%
Pine	4%	8%
Pipestone	1%	-21%
Polk	15%	12%
Pope	15%	13%
Ramsey	-3%	-3%
Red Lake	37%	47%
Redwood	3%	8%
Renville	3%	4%
Rice	3%	11%
Rock	-2%	4%
Roseau	110%	116%
Scott	-6%	-5%
Sherburne	10%	7%
Sibley	5%	1%
St. Louis	7%	10%

Lead agency	Projected percent change to rates for lead agency as COR	Projected percent change to rates for lead agency as CFR
Stearns	5%	2%
Steele	-2%	5%
Stevens	4%	-6%
Swift	13%	6%
Todd	-7%	5%
Traverse	-4%	-11%
Wabasha	13%	11%
Wadena	2%	-4%
Waseca	1%	12%
Washington	0%	0%
Watonwan	-1%	-2%
White Earth Tribe	0%	-13%
Wilkin	69%	18%
Winona	4%	2%
Wright	10%	8%
Yellow Medicine	11%	13%

Appendix C

Table 15: Estimated impact by provider federal tax ID, by service bucket

Category	Day	Residential	Unit based without programming	Unit based with programming	All providers - all buckets
Number of providers in study	186	804	167	270	**1,079**
Average percent change projected for providers in 2019	18%	38%	16%	3%	**31%**
Median percent change projected for providers in 2019	0%	11%	7%	-2%	**8%**
Percentage of providers projecting an increase in 2019	50%	68%	57%	47%	**63%**
Percentage of providers projecting a decrease in 2019	50%	32%	43%	46%	**37%**

Table 15 illustrates the average and median changes experienced by providers within each service bucket. This table estimates the projected impact to rates, but does not project changes to provider revenues.

Providers may be included in multiple service buckets. Services included in the day bucket include:

- Adult day care services
- Day training and habilitation services
- Prevocational services.

Services included in the residential bucket are:

- Customized living
- Foster care
- Residential care services
- Daily supportive living services.

Services included in the unit based without programming bucket are:

- Personal support and companion services
- Respite services
- Night supervision.

Services included in the unit based with programming bucket include:

- Behavioral support

- Independent living skills
- In-home family support
- Supported employment services
- 15-minute supportive living services.

The last column in Table 15 illustrates the changes experienced by providers as a whole.

These estimates do not consider rate exceptions, which will affect future projections.

Appendix D

Table 16: Estimated impact by recipient, by service bucket

	Day	Residential	Unit based without programming	Unit based with programming	Total – all buckets
Number of recipients in study	9,670	10,382	1,601	4,799	18,185
Average percent change projected for recipient rates	0%	11%	19%	-8%	6%
Median percent change projected for recipient rates	-4%	4%	14%	-10%	-1%
Percentage of recipients projecting an increase	37%	57%	72%	38%	48%
Percentage of recipients projecting a decrease	63%	43%	28%	62%	52%

Table 16 illustrates the average and median changes projected for recipients' aggregate rates within each service bucket. Most recipients are included in multiple service buckets.

(See Appendix C for a list of services in each bucket).

The last column in Table 16 illustrates the changes experienced by recipients' aggregate rates as a whole. However, these projections do not consider rate exceptions, which will affect projections in the forthcoming years of DWRS implementation as we identify them.

Appendix E

Table 17: Regional variance factors

Region	Residential	Day	Unit with program	Unit without program
Duluth, Minn. area	0.973	0.966	0.979	0.961
Fargo, N.D. area	1.010	1.001	0.976	1.021
Grand Forks, N.D. area	0.976	0.963	0.958	0.956
Lacrosse, Wisc. area	1.001	1.049	1.040	0.941
Mankato, Minn. area	1.020	1.063	1.078	0.955
Metro Minnesota area	1.024	1.023	1.024	1.017
Northeast Minnesota area	0.985	1.001	1.002	0.911
Northwest Minnesota area	0.956	0.947	0.948	0.913
Rochester, Minn. area	1.009	0.988	1.015	1.016
Southeast Minnesota area	0.969	0.959	0.947	0.919
Southwest Minnesota area	0.976	0.963	0.946	0.911
St. Cloud, Minn. area	0.993	0.961	0.957	0.991

Appendix F

Table 18: Regions for variance factors

Region	Lead agencies
Duluth, Minn. area	Carlton County, Fond-Du-Lac Tribe, St. Louis County
Fargo, N.D. area	Clay County
Grand Forks, N.D. area	Polk County
Lacrosse, Wisc. area	Houston County
Mankato, Minn. area	Blue Earth County, Nicollet County
Metro Minnesota area	Anoka County, Carver County, Chisago County, Dakota County, Hennepin County, Isanti County, Ramsey County, Scott County, Shakopee Tribe, Sherburne County, Washington County, Wright County
Northeast Minnesota area	Aitkin County, Bois Forte Tribe, Cook County, Grand Portage Tribe, Itasca County, Kanabec County, Koochiching County, Lake County, Mille Lacs Band Tribe, Mille Lacs County, Pine County
Northwest Minnesota area	Becker County, Beltrami County, Cass County, Clearwater County, Crow Wing County, Douglas County, Grant County, Hubbard County, Kittson County, Lake of the Woods County, Leech Lake Tribe, Mahnomen County, Marshall County, Morrison County, Norman County, Otter Tail County, Pennington County, Pope County, Red Lake County, Red Lake Tribe, Roseau County, Stevens County, Todd County, Traverse County, Wadena County, White Earth Tribe, Wilkin County
Rochester, Minn. area	Dodge County, Olmsted County, Wabasha County
Southeast Minnesota area	Brown County, Faribault County, Fillmore County, Freeborn County, Goodhue County, Le Sueur County, Martin County, Mower County, Prairie Island Tribe, Rice County, Sibley County, Steele County, Waseca County, Watonwan County, Winona County
Southwest Minnesota area	Big Stone County, Chippewa County, Cottonwood County, Jackson County, Kandiyohi County, Lac Qui Parle County, Lincoln County, Lower Sioux Tribe, Lyon County, McLeod County, Meeker County, Murray County, Nobles County, Pipestone County, Redwood County, Renville County, Rock County, Swift County, Upper Sioux Tribe, Yellow Medicine County
St. Cloud, Minn. area	Benton County, Stearns County

Appendix G

Exceptions FAQ

People with banded rates

Q1:. Can a person with a banded rate ever get an exception?

A1: Generally, no: People with banded rates are not eligible for exceptions. Banding is intended to protect providers' rates from drastic changes and to ensure continued access to services for people.

However, for residential services if there has been a change in service need, complete a service intensity change. If the change in the person's need is so significant that the service intensity still does not meet a person's need, an exception may be appropriate.

Q2: Can you give me an example of that?

Q2: For example, if a person sustains an injury, has a new or changed medical condition, or experiences a significant mental health change and now needs increased staffing supervision (the service intensity portion). But along with that, the staff who provide that supervision now need to undergo additional training and/or new, highly experienced or credentialed staff need to be hired to work with the person (increased wages or training costs above the RMS component values). In that case, an exception may be appropriate.

Q3: What about a person who is banded to a weighted average for day or unit-based services, can they get an exception?

A3: Generally, a weighted average is meant to cover both the higher and lower needs of people served at the program (some rates will be higher than the need, some will be lower). However, if a provider has historically served lower-needs people, that would result in a lower historic rate and if a person enters service with such high needs that the costs cannot be absorbed by the gain and loss of the weighted average, an exception may be appropriate.

Exception submissions:

Q4: Can a provider request a rate exception?

A4: Yes, but so can other people. Minn. Stat. §256B.4914 says, an "individual disability waiver recipients, an interested party, or the license holder that would receive the rate exception increase may request that a lead agency submit an exception request."

Q5: Can't I as the provider, just submit an exception directly to DHS?

A5: No. The lead agency must submit all exception requests using the DWRS exceptions request application, DHS 5820. Even if a lead agency is aware of the request and agrees with it, a provider must submit documentation to the lead agency for the lead agency to submit. This ensures that the lead agency is aware and in agreement with a person's extraordinary needs and the cost drivers behind an increased rate.

If DHS receives an exception request directly from a provider, DHS will notify the provider, and CC the lead agency. The message will state that all exception requests must be routed through the lead agency for submission to DHS. DHS will not review the request unless submitted by the lead agency.

Q5: Why can't I, a provider, submit the DHS 5820?

A5: A provider and lead agency need to work together to submit the DWRS exceptions request application, DHS 5820, but ultimately a lead agency must agree with the need and the proposed rate necessary to meet the needs of the person.

Q6. How do I know if an exception rate is approved?

A6: The lead agency will receive an email confirmation from DHS with the approved rate and instructions on how to proceed in RMS to document the approved exception rate.

Exception renewals:

Q7: Why do I need to submit a renewal for a rate exception if nothing has changed?

A7: DHS requires service agreements to be renewed annually. This review is meant to be a time to review a person's needs and make any necessary changes. If a renewal does not occur annually, a change in need may not be identified.

Exception renewals are simple. A lead agency should fill out the DWRS exceptions request application, DHS 5820. In the narrative section, state that nothing has changed with the person and a rate exception is still necessary. You do not need to include attachments.

Q8: Has a renewal ever been denied?

A8: Yes, but it is extremely rare. If an original exception was approved and the need of the person remains the same and the requested rate is the same, DHS will approve the renewal without additional review. If the requested rate has changed, DHS will review to ensure the need of the person remains eligible for the exception and that the changed cost drivers match the need of the person.

Q9: What if a person no longer needs an exception rate?

A9: The lead agency may complete a new calculation in RMS showing the current (non-exceptional) need. The lead agency may then authorize the final rate produced by RMS and the exception rate will naturally expire after one year. You do not need to notify DHS if the exception need lapses before the one-year mark.

Exception denials:

Q10: Can a lead agency deny an exception?

A10: Yes, a lead agency should be the denier of an exception request if one or more of the following are true:

- The person is not eligible (banded or no extraordinary needs identified)
- There are no relative cost drivers related to a need of a person
- The person's needs can be met by additional units of service.

A lead agency must inform DHS of their denial. DHS will document the denial and will only conduct further review if the aforementioned conditions were present and the lead agency did not comply with Minn. Stat. §256B.4914, subd. 14.

Q11: What if a lead agency denies an exception, but I, the provider, feel we need an exception to serve the person?

A11: Ultimately, this should be addressed at the lead agency level through discussion and/or service planning. If a provider feels it is being treated unjustly, it may contact DHS at dsd.responsecenter@state.mn.us.

Q12. Has DHS ever denied an exception?

A12: Yes, but DHS makes every effort to work with the lead agency and provider to identify if a person is eligible for and in need of an exception. We look to see if the cost drivers match the extraordinary needs of the person. If those connections cannot be made, DHS will discuss with the lead agency. If the lead agency does not withdraw the exception, DHS will deny the exception.

Q13: Can I appeal a denial?

A13: Yes, if you are the person who receives services. Providers cannot appeal a decision; only the person who receives services can appeal a denial. However, a provider may request a lead agency correct erroneous entries in RMS that affect a waiver rate.

Exception steps

Q14: What exactly are "extraordinary needs" of a person?

A14: If a person has needs that are reasonably outside of the standard rates, the needs must be clearly identified and documented to support the claim. The RMS framework rates include component values, which were determined by various research methods that act as "standard rates." These costs reflect costs determined by that research to provide the specific service.

Q15: What documentation do I, the provider, need to give to the lead agency to request an exception rate?

A15: Written documentation of your cost drivers that are not included or are above cost drivers in the RMS framework. Specific information such as staff wages, titles and hours of additional training, or specific costs related to the need of a person are helpful to support an exception request.

Q16: What if an exception rate is denied, can I demit the person from service?

A16: No. A service rate cannot be the sole reason you demit a person from service. We understand this time of change can be difficult for providers and lead agencies. However, ultimately, the goal of HCBS services is to provide the most meaningful, appropriate service for people with a disability in order to assist them to live the most independent, integrated, meaningful life possible.

A service rate cannot be the sole reason for demission of a person from service.

Minn. Stat. 245D.10, subd. 3 and 3a identify how and when services can be disrupted and what is required when a provider determines they no longer can serve a person. DHS encourages providers and lead agencies to work together to best meet the needs of the person.

Q17: What if we, the lead agency, do not believe a person has extraordinary needs, but the provider states they no longer will serve the person without the rate exception?

A17: Statute outlines when a person is eligible for an exception. If these criteria are not met, an exception cannot be processed or approved.

Q18: What do we, the lead agency, do when the person has had a change of intensity but does not require an exception to the RMS rate?

A18: Lead agencies have the authority to work on service planning and increase units of service or complete a service intensity if there have been changes in the person's need that do not require increased cost to the component values in RMS.

Q19: Does an exception request (DHS 5820) need to be submitted if we change service intensity?

A19: No, DHS does not need to be notified of a service intensity change. This is still considered to be working within the RMS frameworks. If this change still does not meet a person's need, an exception may be appropriate.

Q20: What if a provider refuses to provide documentation of their cost drivers, but wants to request an exception rate?

A20: Then the provider will not be paid that rate. A lead agency and DHS cannot process an exception request without documentation of cost drivers that are not included in or are above the RMS framework component values. Ultimately DHS is responsible to CMS to be able to justify why we allowed a person's DWRS rate to go outside of the state-established methodology.

Q21: Can DHS grant an exception to authorize a rate that is lower that the RMS rate?

A21: Yes, if the provider and lead agency agree that the higher rate is not needed to provide the service, the lead agency may submit an exception request to the lower rate.

Q22. Where can I get more information?

A22: To read more about exceptions, see CBSM -- Exceptions. Otherwise, email the Disability Services Division's fiscal rates team at DSD.fiscal@state.mn.us.

Appendix H: Non-wage cost component study

In 2015 and 2016, DHS completed a study on all non-wage cost components. This study helped us validate previously identified values and, where needed, recommend modifications to framework values. DHS commissioned an independent research firm, Truven Health Analytics, to conduct this research.

The following is the full text of the June 2016 Truven non-wage cost component study. For a summary of this study, see the non-wage cost component study section of this report.

Introduction

Minnesota Statutes 2013, section 256B.4914, subdivisions 10 (b) and (g), state that the Commissioner shall conduct analyses that address differences in the underlying cost of providing home and community-based disability waiver services (HCBS) throughout the state. In a prior study for the Minnesota Department of Human Services (DHS), Truven Health researched and made recommendations for implementing an index to capture their variation in wage-based costs. The aim of this new study is to investigate the non-wage cost components associated with providing DWS. We sought to address the following questions posed by Minnesota DHS:

- What specific non-wage costs are needed to provide HCBS effectively? Are there cost components that have not been identified previously?
- By service framework and by service bucket, what value and/or percentage should be incorporated in the rate methodology frameworks to cover each identified non-wage cost component?
- By service framework and by service bucket, how do these cost components vary by provider? Were statistically significant trends observed, such as characteristics of recipients served, waiver type, and geographic region?

To answer these questions, we (1) collected data from primary data sources, where available, and (2) developed and administered a provider survey in collaboration with DHS and other key stakeholders.

These data collection activities were conducted by a panel of Truven Health Medicaid experts, Minnesota DHS personnel, provider focus groups and stakeholders. We used the data collected to complete the following steps:

1. Validate existing and identify new non-wage cost components
2. Determine the values of each non-wage cost component
3. Identify whether credible variation in non-wage cost components across different service buckets and categories, geographic areas, waiver programs, and other meaningful characteristics could be determined.

In this report, we present the results of our study. First, we discuss our underlying understanding of the issues and preliminary research activities conducted in preparation for our data collection. Next, we discuss the methodologies and results of our primary data collection and our provider survey by non-wage cost category. We then provide our recommendations based on both data collection activities. We conclude with a discussion of challenges, caveats, and limitations, and suggest further areas of study.

Preliminary research

Review current rate-setting methodology structure

Our initial step was to review the current rate-setting methodology to identify underlying issues, gaps, and areas for improvement in this current methodology. Three resources provided the foundation for understanding the current rates, how they are calculated, and the supporting data for the factors used. The first resource from the Minnesota DHS titled the Disability Waiver Rate System Component Values Effective January 1, 2014 (PDF). It provided a concise summary of each of the current framework factors and how they differed between service buckets. The second resource, the DWRS frameworks page from the DHS website provided all current disability waiver rate setting frameworks and showed the details for how the framework factors are applied (e.g., order of operations).

The third resource, which provided information for the values in the current methodology, was a report produced by Navigant Consulting, Inc. (Navigant) titled *Summary of Recommendations: Results of 2010 Rate Setting Methodologies Initiative (RSMI) Analyses and Recommendations* (Navigant Report), from January 31, 2012. Much like the study that we were engaged to perform, the Navigant Report was based on both a primary data search and a provider survey. Although the Navigant Report made recommendations for the cost components necessary to provide DWS in Minnesota, the rate-setting methodology was developed and finalized after recommendations were made to the Minnesota DHS. For some factors, a key difference will be that the Navigant report provided most rates as a percentage of total compensation. In contrast, our recommendations take into account the order of operations that are part of the current rate-setting methodology. Where possible, we have made our recommendations in light of this methodology.

The following are cost components of the current rate-setting methodology:

- Hourly wages
- Supervision/span of control
- Vacation, sick leave, and training
- Taxes and workers' compensation
- Other benefits
- Client program and support
- Program plan support
- Standard general and administrative (G&A) support
- Program-related support
- Utilization and absence
- Transportation
- Facility use.

Through preliminary research, we found that these cost components comprehensively cover the allowable costs associated with providing home and community-based services. However, some areas within this component structure provide good opportunities for refinement or clarification in their definition. (NOTE: These are discussed further in the primary data collection section of this report.)

Hourly wages were researched in a prior study, so we excluded them from our analysis of non-wage cost components. We also excluded unallowable non-wage costs that are not eligible within Medicaid rates, such as charitable contributions and lobbying costs.

The cost components identified above represent the scope of costs extensively studied within this report. Some additional nuances within the frameworks, such as wages or customizations for people who are deaf or hard of hearing, were not included in our study.

The cost components were categorized by four primary service buckets:

- Day
- Residential
- Unit-based with programming
- Unit-based without programming.

Those four buckets were further broken down by service categories that align to framework models (see Table 1-Table 4 on the next page).

Day services

NOTE: You can find the following models on the DHS framework page.

Table 1: Service organization by day service bucket

Services	Framework model
Adult day, 15-minute	AdultDayCare15Min.xls
Adult day, daily	AdultDayCareDaily.xls
DTH, 15-minute	DTH15minutes.xls
DTH, daily	DTHdaily.xls
Prevocational services, hourly	PrevocHourly.xls
Prevocational services, daily	PrevocDay.xls
Structured day, 15-minute	StructuredDay15Min.xls
Structured daily, daily	StructuredDayDaily.xls

Residential services

Table 2: Service organization by residential service bucket

Services	Framework model
Customized living daily, 24-hour customized living daily, and residential care services daily	CustomizedLivingandResidentialCareSerives.xls
Corporate foster care daily and corporate supportive living services daily	FosterCareSupportedLivingCorporate.xls
Family foster care daily and family supportive living services daily	FosterCareSupportedLivingFamily.xls

Unit without programming

Table 3: Service organization by unite without programming service bucket

Services	Framework model
Personal support and companion services	PersonalSupport.xls
Night supervision	NightSupervision.xls
Respite care services, 15-minute	Respite15minutes.xls
Respite care services, daily	RespiteDaily.xls

Unit with programming

Table 4: Service organization by unite with programming service bucket

Services	Framework model
Behavioral support services	BehaviorSupport.xls
Housing access coordination	HousingAccessCoorindation.xls
In-home family support	InHomeFamilySupport.xls
Independent living skills training	ILSTraining.xls
Supportive living services, 15-minute	SLS15Min.xls
Supported employment services	SupportedEmployment.xls

We believe that this service structure should remain intact, because it appropriately reflects the variety of HCBS offered in Minnesota. Although other strong systems have been identified, we did not find sufficient evidence to substantiate changing the basic rate structure. During a scan of comparable state policies related to payment structures, no findings indicated that new rate structures would result in meaningfully different or more equitable rates.

The burden to change to an entirely new rate structure is considerable, so we advise against major modification. Rather, we suggest implementing refined rates within the existing framework to achieve payments that more accurately reflect cost. Through our panel, focus group, and survey responses we received feedback that certain types of expenses were not currently being covered. However, it has been determined that, of the allowable costs, all of these can be included under one of the existing framework definitions. Although some providers have suggested that certain costs are not currently addressed, further clarification of the categories has demonstrated that these costs are in fact included in the current components.

Gather information from multiple sources

To prepare for our data collection activities, we sought input from a variety of sources to enhance our understanding of the current rate-setting structure. Our team obtained feedback from multiple stakeholders, such as the Minnesota DHS and the Advisory Committee, focus groups comprised of providers and other related groups, as well as Truven Health Medicaid experts. Details regarding these activities are provided below:

- **Review of prior Minnesota cost study.** We reviewed the Navigant Report because it forms the basis for many of the current rate-setting inputs. We found that many of the sources of information in that report remain valid. In the current study, we updated references from the Navigant Report, and we offer additional refinement to several cost components.
- **Meetings with the Minnesota DHS.** Throughout our study, we conducted biweekly meetings with the Minnesota DHS, in addition to frequent ad hoc communication, to gather critical feedback on our approach. These meetings provided insight into the knowledge and experience of Minnesota service providers and the constituents who may be affected by any changes to the rate-setting methodology.
- **Advisory Committee meeting.** We presented our rate-setting methodology at the November 19, 2015, Advisory Committee meeting to engage key stakeholders in the

Minnesota HCBS community. We used this meeting as an opportunity to elicit feedback from Advisory Committee members.

- **Focus groups.** On November 19–20, 2015, we conducted two focus group meetings with a cross section of Minnesota HCBS providers to seek input about the provider survey development process.
- **Internal Medicaid experts committee.** We contacted a panel of Medicaid experts within Truven Health and solicited information about HCBS rate-setting methodology. The panel identified primary sources, potential risks, and best practices throughout the course of our study.
- **Survey communication plan.** Before releasing the survey, we planned a host of communications to ensure that the survey was marketed comprehensively. This plan included multiple notifications sent to providers, a recorded webinar to walk participants through the survey, and a guidance document to concisely show all survey questions.

The goals of these activities were (1) to provide ample opportunity through multiple channels for all stakeholders to understand the purpose and importance of our study and (2) to encourage participation, elicit feedback, and gain a deeper understanding about stakeholders and the current rate-setting methodology.

Create a research timeline

This section outlines the activity timeline for this study. Here are key project milestones and dates.

- **Minnesota DHS site visit, November 18–20, 2015**
  - Advisory Committee meeting, November 19, 2015
  - Focus groups, November 19–20, 2015
- **Survey, February 19, 2016**
  - Release sample survey to focus group participants, December 14, 2015
  - Survey communication blasts to providers, December 15, 2015 – February 19, 2016
  - Survey released to participants, January 19, 2016
  - Survey training webinar, January 20, 2016
  - Survey submission deadline, February 19, 2016
- **Primary data collection, November 19, 2015 – February 29, 2016**
- **Final non-wage cost report, May 31, 2016**
  - Advisory Committee meeting, June 21, 2016

Primary data collection

This study used primary data sources where possible for determining non-wage costs in Minnesota. In our research, we studied articles, websites, and publically available data sets. We performed our primary data research in accordance with the following considerations:

- **Data specificity.** Our primary aim in this study was to produce factors that accurately reflect costs to reimburse participating providers for the provision of HCBS. Therefore, we evaluated the denomination, or method of payment, to determine whether it accurately reflects the way that costs are incurred. We evaluated each subcomponent of non-wage

costs and determined which denomination best reflects the reimbursement method. We also identified suitable levels of data specificity for each cost component.

- **Variation by bucket or service.** The current cost structure has some cost components that are applied consistently across all services, whereas others vary by service bucket. We studied whether variations were warranted across the buckets of service through the survey.
- **Variation by geography or urban/non-urban designation.** For most cost components, we were not able to identify a primary data source that demonstrated geographic variation. However, we were able to capture variation using health insurance premiums from MNsure.org. One challenge with these results is that the variation in health insurance premiums are defined by nine areas that do not map cleanly with the Metropolitan Statistical Areas (MSAs) used in the wage variation. Instituting a factor to account for the geographic variation in health insurance would be challenging to implement. It also should be noted that because wages currently vary by MSA and most of the cost components are multiplied by the wages, the current framework pays disproportionately for various costs based on the wage adjustment.

Primary data collection results

Our primary data research yielded several robust sources of information. Consistent with the Navigant Report, our search for benefit-related information (i.e., insurance, retirement, vacation time) within cost components produced more credible sources than our search for information on non-benefit cost categories. We were able to identify a number of credible data sources from the Internal Revenue Service (IRS) and Bureau of Labor Statistics (BLS) and from data gathered from other state methodologies for determining non-wage costs, among other sources.

In some cases, we felt that our primary data sources provided very clear findings that easily translated into relevant results for our study. Other sources provided benchmarks to determine a reasonable range of results to use to validate our survey findings. For example, we identified similar reports from Arizona, Georgia, Maine, Oregon, and Virginia; however, these reports were identifying similar cost components representing different services, primarily behavioral health. Therefore, we have represented these findings as a reasonable benchmark for our survey results.

BLS provided a wealth of information for our study, but BLS findings are reported by industry category or by geographic location, but not both. Therefore, we had to make some assumptions in terms of which category of data provided a more accurate depiction of costs for the Minnesota HCBS. In most cases, we believed that services within the same industry provided a better view at costs than geography. For these categories, we applied a modifying factor to account for geographic changes within the data. We believe the geographic factors provided better results for taxes and workers' compensation, because tax rates are tied to geography rather than to industry.

The results of our primary data research are discussed within the Combined Recommendations by Component section of the report. Appendix B details our primary source findings.

Provider survey

The provider survey was a critical part of our study because it contributed insights on the specific costs for providing the various HCBS offered in Minnesota from stakeholders who have detailed knowledge about their specific costs. We developed our survey design process to maximize stakeholder engagement and provider participation through a collaborative, inclusive, and transparent process. We also used the stakeholder survey as a potential source for information that was not found in primary data sources. We sought to give providers insight into the purpose and methods of our study and to allow ample opportunity before and during the survey's design to provide objective information regarding their costs.

Survey design

Our top priorities in designing the survey were to capture all appropriate metrics related to provider expenses of HCBS, maximize provider survey participation, and minimize bias in survey results. We based the survey's initial designs on extensive preliminary research activities outlined earlier in our report, in addition to input from experts with the Minnesota DHS and key figures in the HCBS provider community. We conducted two focus groups with a variety of HCBS providers and trade group representatives to identify any potentially problematic parts of the survey and to address possible deficiencies within the current framework. These conversations proved vital in informing the survey's design.

We developed survey questions that were concise and clear. Where appropriate, we designed the survey to solicit exact dollar amounts for various costs and measures of total costs per category of non-wage expense. We tested the survey with participants from the focus groups prior to full launch to identify and refine any potential problem areas in the survey. During this review period, we made numerous changes to the draft survey in direct response to stakeholder feedback.

After finalizing the survey and developing a comprehensive state-wide list of appropriate providers, we released the survey to all eligible providers on January 19, 2016. The survey was administered via SurveyMonkey®, an online survey tool. The Minnesota DHS contacted all HCBS providers in the state through its central provider portal, MN-ITS, to solicit provider email addresses. Those providers who submitted their email addresses were able to create a unique profile for their organization whereby survey responses could be saved and ultimately submitted.

Survey outreach and technical assistance

Our outreach and support of the survey covered several activities during survey development and continued through the survey response period from January 19 to February 19, 2016. These activities included the following:

- **Advisory Committee meeting.** We discussed our initial survey plan at the November 19, 2015, Advisory Committee meeting, which included an open dialog about ideas to consider in the survey as well as the best ways to communicate with participants to maximize participation. Discussion involved provider outreach strategies and stakeholders' key concerns with the current framework.
- **Focus groups.** On November 19–20, 2015, we conducted two focus group meetings with a varied cross section of Minnesota HCBS providers to inform the provider survey development process. We selected focus group participants to capture the breadth of

provider types and services across the state—specifically large and small, geographically diverse providers and representative trade groups. Focus group participants provided input on which metrics should be studied and how best to solicit information on those metrics through the survey. We maintained an open dialog through email with focus group participants throughout the development of our survey in order to provide ample opportunity for feedback. This included soliciting feedback on a draft survey from all 25 focus group participants. (NOTE: Truven Health received 148 comments from focus group participants through the draft survey feedback solicitation. These comments were incorporated into the final survey.) These participants reviewed the draft survey and offered critical input. We tracked all feedback and incorporated key insights and recommendations into the survey.

- **Technical assistance.** To ensure that participants were well-informed and supported throughout the survey response, we offered multiple forms of technical assistance.
  - **Survey webinar.** On January 20, 2016, we hosted a webinar that provided an overview of the study and explained how to gain access to, complete, and submit the survey. The webinar was recorded and posted to the DHS website to be accessed throughout the survey response period.
  - **Guidance document.** We provided a guidance document that accompanied the survey and offered a consolidated overview. This document allowed participants to gather their responses without being logged into the survey.
  - **Mailbox/help desk.** We established a dedicated, email-based helpdesk to answer questions related to the survey. We received and answered over 220 inquiries throughout the survey response period.

We tracked all conversations and emails with stakeholders to ensure that their concerns were reviewed and addressed in our survey development.

Survey results

At the survey's conclusion, we compiled all response data for review. We applied a variety of statistical calculations (average, median, standard deviation, and variance) to better understand the distribution of responses received in our survey. We used wages as a benchmark for other costs to capture the difference in size for a particular organization. Based on our distribution analysis on each cost component, we removed outliers by applying maximum and minimum caps to determine the range of credible responses.

We also performed analysis on what percentage of the entire Minnesota HCBS provider community submitted responses to the survey. Despite significant outreach efforts to providers, the response rate was not as strong as anticipated. Although 466 unique provider email addresses registered to receive the survey, only 296 responses were received. Of these responses, many were duplicate, incomplete, or abandoned surveys. The final number was 193 responses that could be included in our results.

We compared the tax identification numbers (TINs) for the valid responses with a database of all TINs for providers of HCBS services in calendar year (CY) 2015 and their corresponding revenue. This comparison gave us a better understanding of the representation of our survey responses. The results of this analysis are captured below:

- Out of a possible 1,321 TINs, 193 TINs were captured in our survey, representing 15 percent of the total
- Out of a possible 2,939 possible provider ID's, 492 were captured in our survey, representing 17 percent of the total (NOTE: Some TINs may have multiple provider IDs)
- These responses corresponded to $1.096 billion out of $3.281 billion of total Minnesota HCBS paid claims during CY 2014-2015, or 33 percent of the total.

The survey response was not high enough to offer statistically valid results for geographic-based recommendations. However, the survey results have been shown by service bucket for those components whose rates currently vary by service bucket. Other factors, which are currently the same across all service buckets have only been represented in aggregate. Providers with less than $250,000 in CY 2015 revenue were given a more simplified survey, which allowed costs to be reported in aggregate but not by service category. Therefore, these responses only impact the aggregate results for each cost component.

Combined recommendations by component

Our recommendations are derived from the analysis of our primary data sources and our provider survey. In determining and comparing data quality, we had three key factors used to assess the data we found: reliability, applicability, and consistency.

- *Reliability* relates most closely to the confidence held in that particular data point. If a particular data source is well established and respected with a rigorous methodology, we assess its reliability highly.
- *Applicability* requires that the data apply specifically to the component at hand, with corresponding services and client populations. Toward that end, we have evaluated demographic and geographic similarity in our state comparison analysis. For example, data sources that relate directly to Minnesota Medicaid HCBS services would be considered most applicable.
- *Consistency* dictates that any source that deviates significantly from all other sources should be given less weight, and that sources should be able to be validated by other available data. Therefore, we view data that cannot be validated easily as less consistent.

The remainder of this section details the findings of our research by cost component. For each component, we provide a definition of the cost component, and then we share the results of our primary data research and provider survey. Because some recommendations have been made as a percentage of wages or another denomination that may not match the current framework calculation, where necessary, we provide a translation of the recommended results in light of its placement within the framework. These translations will be made assuming that all other cost components stay at the current level. If some of the factors are implemented, it is strongly advised that these translations be taken into considerations in order to properly reflect the denomination of each recommended factor. Also, most of our results and recommendations have been shown with 1 decimal point of precision, which we feel is appropriate. In some cases within the primary research, greater precision was provided in the data, which we have reflected in the report.

Supervision/Span of control

Definition

This cost component captures the supervision cost of direct care staff, expressed as the ratio of supervisors to direct care staff.

Primary data results

This cost component deals with the direct ratio of care providers to their supervisors, so it is closely tied to the exact services provided. For this reason, we feel that the survey data is a better source of information for this component. We were unable to identify sources of information that provided meaningful comparisons for this component. For comparison states, the Program Plan Support factor is assumed to combine the Supervisor Span of Control and the Program Plan support in the costs. This is consistent with the previous Navigant-provided combined rate.

Provider survey results

Supervision/span of control is calculated based on the supervisor count divided by the total employee count (not including supervisors) to develop a supervisor to employee ratio. This is distinctly different from the other factors developed because it is not based on direct care wages. Also, for this calculation, part-time employees were assumed to count as 50 percent of a full-time equivalent (FTE), and temporary employees were assumed to count as 25 percent of an FTE.

Because the supervision/span of control factor does not vary by service category, results were only captured across all service categories. The survey findings for this category yielded a 12.8 percent ratio of supervisors to direct care staff.

Recommendation

The current factor for this component is 11 percent, whereas our survey yielded a rate of 12.8 percent. We recommend a rate of 12.8 percent for this component because it is a more recent representation of provider experience than the current factor, although we believe that a factor in the range of 11 percent to 12.8 percent would be reasonable to be used in the frameworks.

Vacation, sick leave, and training

Definition

This component covers wages paid to staff while they are on vacation, on sick leave, or in training.

Primary data results

We used the National Health Care and Social Assistance tables from BLS to develop the vacation and sick leave factors. The BLS-provided factor of 10.9 percent applies to wages, after converting it from a total compensation factor. Regional data are available for the West North Central Division (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota). However, these data include all occupation and industry types. Instead, we elected to use industry-specific data for health care and social assistance because they are more representative of actual costs of providing HCBS. This industry rate has been adjusted to account for regional variation captured in BLS.

A training factor of 2.0 percent is the result of our primary research. This factor comes from BLS, and has been adjusted to reflect a percentage of direct billable time, opposed to total time worked.

The total wage-based factor of 12.9 percent combines the BLS paid time off (PTO) rate of 10.9 percent plus a training factor of 2.0 percent.

Provider survey results

Vacation, sick leave, and training resulted in an average factor of 10.6 percent of wages, which was comprised of 8.0 percent of PTO and 2.6 percent training time.

Recommendation

Both the primary and survey results provided credible sources of information for the vacation, sick, and training component, based on our stated criteria. We recommend using the survey factor of 10.6 percent of wages since it most closely represents the experience within MN HCBS, and the survey results were strong.

Program plan support

Definition

Program Plan Support is defined as the direct service staff needed to provide support of the HCBS service when not engaged in direct contact with clients (indirect time). Examples include, but are not limited to the following:

- Documentation
- Direct staff preparation and service planning
- Collateral contact related to direct service
- Travel time when the client is not present

Primary data results

Although our comparison states provide a basis of comparison, they vary significantly and do not accurately represent the HCBS services provided in Minnesota. Because this cost component is closely tied to the specific services provided in Minnesota, we feel that the survey is a better source of information for this component.

Provider survey results and recommendation

The Program Plan Support component values vary by service component since this is a time-based factor intended to capture how much indirect time is spent performing activities not directly related to the provision of care. In addition, the current rate frameworks and billing structures apply nuanced calculations aimed at capturing some of this inherent variation. Therefore, the survey results for Program Plan Support must be considered in the context of the service frameworks to which they apply.

The current Day services frameworks include a staffing ratio adjustment factor which is intended to account for indirect time, where more indirect time in aggregate is required to serve people with a higher ratio of care recipients to direct care staff. Our survey results for Day services indicated 16 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. Much of this indirect service cost is already accounted for in the staffing ratios and within the bundled daily billable unit. Since a considerable amount of this time is already accounted for, we cannot recommend implementing a 16.0 percent factor, as this would over account for indirect time in the framework. We recommend a time study to better understand how best to determine and apply an appropriate Program Plan Support factor within the current Day framework.

Residential programming is currently reimbursed as a bundled service which provides a full daily rate. The bundled daily rate incorporates all staffing hours provided in the home, which includes both the direct care staff's time spent directly with the person and time spent performing indirect tasks. 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. Again, we cannot recommend use of this factor, since this time is already built into the current bundled rate.

For the Unit Based With and Without Programming services, Program Plan Support time is not built into the structure of the current frameworks in the same way it is for Day and Residential Services. For this reason, we are able to recommend their use. The Unit Based With Programming survey result was 15.5 percent, and the Unit Based Without Programming result was 7.0 percent. We recommend the use of these factors, as they reflect how much indirect time is necessary for the provision of these services.

Taxes and workers' compensation

Definition

Taxes includes state and federal rates including Federal Insurance Contributions Act (FICA), **Federal Unemployment Tax Authority (**FUTA), and **State Unemployment Tax Authority (**SUTA). Costs for workers compensation are also included in this component.

Primary data results

The Taxes and Workers Compensation factor is composed of legally required federal and state benefits. The combined result for our primary research is 11.06 percent. This includes federal and state taxes and workers compensation costs, as outlined below.

Federal taxes

Information for federal taxes was readily available from the IRS website and included subcomponents for federal and state taxes. Federal tax information consists of FICA, Medicare tax withholding, and FUTA. The combined federal tax rate result is 7.78 percent.

FICA incorporates a wage-based limit for Social Security tax of $118,500. However, because this annual income is likely higher than that paid direct care providers, no adjustment was made to the factor. The full 6.2 percent is indicated for use as a factor applied to wages.

For Medicare tax withholding, the standard 1.45 percent is suggested for use as a factor applied to wages. There is no cap for Medicare taxes wages, and although an additional

0.9 percent is withheld wages in excess of $200,000, this has not been included because the wage threshold reasonably exceeds the anticipated direct care wages.

The FUTA tax of 0.13 percent is based on BLS West North Central rates (.TXT) and reflects the annual wage base limit of $7,000. The standard rate is 6.0 percent, but most employers received a credit of 5.4 percent when their Form 940 (FUTA Tax Return) is filed. It has been assumed that the Form 940 has been completed, and a net 0.60 percent applies. Also, an annual wage-base limit of $7,000 applies to FUTA. Once employee year-to-date wages exceed $7,000, an employer stops paying FUTA for that employee. This limit equates to $3.37 per hour and is assumed to be exceeded over the course of the year. To adjust for the wage-base limit, the BLS factor of 0.13 percent is indicated.

It is important to note that both the FUTA and SUTA have limitations and are no longer collected once a maximum employee wage threshold is reached in a given year. We used BLS data as a proxy for applying this maximum-wage threshold. Any alternatives to including a flat dollar amount for this threshold would not fit into the current framework method.

State taxes

State tax information consists of SUTA and the Workforce Development Fund. The combined primary source state rate result is 1.59 percent.

The state unemployment tax and workforce development fund includes an annual wage base limit of $31,000 applies to SUTA. Based on the professions providing services, the Non-High Experience rate of 1.49 percent for new employers is suggested. No additional reductions were applied based on the annual wage base limit.

The Workforce Development Fund has an annual wage base limit of $31,000 (about $14.90 per hour) and applies to the Minnesota Department of Employment and Economic Development (DEED) Workforce Development Fund. The factor of 0.10 percent is indicated with additional reductions applied based on the annual wage base limit.

Workers compensation

Worker's compensation rates vary based on the provider's experience and will vary between providers. BLS reported a wage-based factor for workers compensation in the West North Central Division of 1.69 percent.

Provider survey results

Because the taxes and workers' compensation should not vary by service category, we captured results across all service categories. The average wage-based taxes and workers compensation response was 11.4 percent.

Recommendation

We recommend using primary sources results of 11.06 percent in order to capture costs related to taxes and workers compensation. For this particular survey response, there were a considerable number of responses that were deemed outliers. However, the overall survey response was very close to the result of our primary research, which bolstered our confidence in our recommendation. In addition, the information sources gathered from our primary data were very

strong and credible. In the current framework model, Taxes and Workers Compensation are combined with Other Benefits to form Employee Related Expenses, and will need to be combined in their application within the frameworks.

Other benefits

Definition

Other benefits refers to other employer-provided benefits to include health insurance, short-term disability insurance, dental insurance, retirement, vision, tuition reimbursement, life insurance, and wellness programs. Other benefits may include additional benefits not included in this list.

Primary data results

For other benefits, primary data sources indicate a factor of 20.44 percent, which is a combination of insurance, retirement and savings, and supplemental pay (such as bonus compensation) costs gathered from BLS Employer Costs for Employee Compensation (.TXT, accessed March 28, 2016). These costs were averages taken from 2015 Q1–Q4 total compensation amounts, modified to reflect the percentage of wages within total compensation. This modification more accurately reflects the way that other benefits are captured within the current rate framework.

These results indicate a significant increase over the current 12.04 percent. These results have been captured in Table 3 below.

Table 316: Survey Results for Other Benefits

Other Benefits	Source	Factor, % of Wages
Insurance	BLS	12.57
Retirement and savings	BLS	4.81
Supplemental pay	BLS	3.06
Combined Result for Other Benefits		20.44

Abbreviation: BLS, Bureau of Labor Statistics

We also collected data showing geographic variation in health insurance costs from MnSURE.org. By taking averages of health insurance premiums at different age groups and metal coverage levels (bronze, silver and gold), we compared the relative average premiums within nine coverage areas. Table 4 shows the relative values of insurance premiums, using Area 1 as the benchmark within each age and coverage level category.

Table 4a: Average Relative Insurance Premiums by Age and Coverage Area on MNsure.org, as a Percentage of Area 1 Premiums, by age in years

AGE IN YEARS

Age	Coverage	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
25	Bronze	100	72	85	94	90	83	67	65	81
25	Silver	100	76	88	108	90	83	71	69	81
25	Gold	100	84	89	101	93	87	74	78	81
40	Bronze	100	72	85	93	90	83	67	65	81
40	Silver	100	65	88	96	90	84	71	69	81
40	Gold	100	84	88	101	93	86	74	77	81
60	Bronze	100	72	85	93	90	83	67	65	81
60	Silver	100	77	88	96	90	84	71	69	81
60	Gold	100	84	88	101	93	86	74	77	81

Table 4b: Average Relative Insurance Premiums by Age and Coverage Area on MNsure.org, as a Percentage of Area 1 Premiums, family of four

FAMILY OF FOUR

Coverage	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
Bronze	100	72	85	93	90	83	66	65	81
Silver	100	74	95	103	97	90	76	74	86
Gold	100	84	88	101	93	86	74	77	81

Table 4c17: Average Relative Insurance Premiums by Age and Coverage Area on MNsure.org, as a Percentage of Area 1 Premiums, average by area

AVERAGE BY AREA

Coverage	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
Average by area	100	76	88	99	92	85	71	71	81

Although the MNsure.org rates offer a credible source of information on variation across the state, one challenge is that the nine areas defined within MNsure.org rates do not map cleanly to the MSA structure. For example, some MSAs are represented by as many as four different MNsure.org areas. It becomes challenging to determine an appropriate way to represent the variation in cost, given that MSAs are currently used to apply variation to wage costs in the frameworks. In addition, the Minnesota DHS should consider the administrative burden of applying multiple geographic rate modifications and the cumulative effect they would have for a particular provider.

Of the primary sources available, the most reliable and applicable source indicates a value of 20.44 percent, reflected as a percentage of base wages. This percentage is the BLS national industry-specific amount for Insurance, Retirement and Savings, and the new category of Supplemental Pay costs to health care and social assistance employers. This factor is significantly different from the current factor of 12.04 percent.

Provider survey results

Given that other benefits should not vary by service category, results were only captured across all service categories. The survey response indicated a wage-based result of 13.1 percent of wages for other benefits.

Recommendation

Our primary research result of 20.44 percent was significantly higher than the survey result of 13.1 percent for other benefits. Since the 20.44 percent recommendation comes from a credible source of information, BLS, we believe the survey results indicate that many providers are either not providing other benefits to their employees, or these benefits are not given at the same level as the national benchmark population reported through BLS. For these reasons, we recommend the survey result of 13.1 percent of base wages be applied for other benefits. This factor, as a percent of wages, does not need to be adjusted to fit within the current framework methodology to account, which will be discussed below. Also, while we were able to find information indicating geographic variation in health insurance premiums throughout Minnesota, we believe that applying a regional adjustment factor should not be introduced.

Since Taxes and Workers Compensation and Other Benefits are combined in the framework to form Employee Related Expenses, we recommend that they be considered combined in our recommendation in order to properly reflect these factors within the framework. Our Employee Related Expenses recommendation, as a percent of wages, is 24.16 percent, which is a combination of 11.06 percent for Taxes and Workers Compensation plus 13.1 percent for Other Benefits. While Employee Related Expenses is applied after the Program Plan Support factor, it is unnecessary to make any modifications since Program Plan Support accounts for additional support time provided by direct care workers which are covered within the wages these employees are paid.

Client program and supports

Definition

Client Program and Supports is defined as the provision of the participant's access to the community or care in their home. State plan or other available waiver services must be accessed first, and those services must be billed separately. Examples of allowable costs vary by service, and may include, but are not limited to the following:

- Supplies and equipment that are not available through Medicaid state plan or other waiver services
- Participation costs for staff
- Reinforcers as defined in the participant's support plan
- Cost to access services

Primary data results

Based on the definition of this cost component, there were no directly comparable sources of data. The survey results should be used for a recommendation.

Provider survey results

The results by for client programming and supports, by service component, are shown in Table 5.

Table 5: Results for client program and supports

Component	Day	Residential	Unit Based With Programming	Unit Based Without Programming	All Service Categories
Client program and supports, % of wages	9.2	5.2	5.8	2.9	7.1

Recommendation

Before making a recommendation for this cost component, we must take into consideration the differences in the framework application of programming plan support and the wage-based results from the survey. Since Employee Related Expenses are applied within the frameworks after wages, we must restate our Client Program and Supports recommendation to reflect this order of operations. To make this conversion, our wage-based results in Table 5 must be divided by (1 + Employee Related Expenses) to be stated as a percent of wages *and* Employee Related Expenses. Since this cost component also varies by service category, we have demonstrated the changes necessary to our wage-based results below in Table 6, using the current Employee Related Expenses factor of 23.6 percent.

Table 6: Recommendations for client program and supports

Component	Day	Residential	Unit Based With Programming	Unit Based Without Programming	All Service Categories
Client program and supports, % of wages and employee related expenses	7.4	4.2	4.7	2.3	5.7

If a new Employee Related Expenses factor is used, this calculation will need to be reconsidered by dividing the wage-based recommendation by the updated Employee Related Expenses factor.

Also, the current Residential framework uses a flat annual dollar amount for the Client Program and Supports factor. From our analysis, we believe our recommended value, as a percent of Employee Related Expenses, is in line with the current framework value.

Standard G&A

Definition

This category includes general office and administrative overhead business costs including liability and malpractice insurance, administrative salaries for finance, accounting and auditors. This also includes office supplies, postage and any administrative office space necessary.

Primary data results

Our primary research yielded Standard G&A results between 10 percent and 20 percent of total service costs. Much of the variation in this category comes from how other states have defined the category and which costs are included. We have observed that costs within Standard G&A and Program-Related Expenses often are not delineated consistently from state to state. The current rate of 13.25 percent of total costs reasonably falls within the range observed in other

states; however, we suggest using the results from the survey to provide a more refined recommendation.

Provider survey results

Standard G&A has an average survey result of 23.0 as a percent of wages, across all service buckets. Both Standard G&A and Program Related Expenses currently are represented as a percentage of wages, and the denominator will need to be restated to align with framework calculation. It also appears that some costs were stated for an entire organization (e.g., administrator salaries) and are not allocated based on the percentage of HCBS services that the organization provides, which would suggest that some survey responses for this component may include extraneous costs. HCBS should not bear the full administrative cost of an organization offering services besides HCBS.

Recommendation

Since our primary research was more useful in determining an overall range of possible factors, we recommend using the survey results to form the basis of our recommendation. To restate one complexity, the current Standard G&A factor is represented as a percent of total costs, which is consistent with the range provided through our primary research of 10 – 20 percent. Our survey results however, have been calculated based as a percent of wages. Therefore, the survey result must be translated to fit into the current framework, as 23.0 percent will significantly overstate Standard G&A costs. Since Standard G&A, Program Related Expenses and Utilization and Absence are combined before being applied in the rate frameworks, the translation calculation of this factor is described in the Program-Related Expenses section of this report.

Utilization and absence

Definition

This factor accounts for costs associated with absences of the care recipient. It approximates providers' fixed costs when a recipient is not able to participate in a planned service. This cost covers both provider vacancy and recipient absences.

Primary data results

Utilization and absence factors found in other states range from 2 percent to 6 percent, however, these factors primarily account for absence, not utilization. Our findings suggest that a factor within the range of 2 to 6 percent of wages is reasonable for Utilization and Absence, but believe that the survey results provide better results due to their inclusion of utilization in the results.

Provider survey results

The results for Utilization and Absence were captured by service bucket and provided as a percent of wages, are shown in Table 7, below.

Table 7: Survey results for utilization and absence

Component	Day	Residential	Unit based with programming	Unit based without programming	All service categories
Utilization and absence, % of wages	3.1	2.2	7.5	3.9	3.9

Recommendation

We recommend that service bucket factors in Table 7 be used for utilization and absence, once they are translated into the current framework which is done in the Program Related Support section.

Program related support

Definition

This component captures overhead costs such as technology software and hardware, telecommunications, and billing infrastructure. In some cases, this component is referred to as Program G&A. Also, in the frameworks, Program Related Expenses is a category which includes Program Related Support, Standard G&A and Utilization and Absence.

Primary data results

Comparable Program-Related Expenses in other state behavioral health programs have been provided as a flat dollar amount per member per day. When converting this rate to a percentage of total service costs or percentage of wages, there is a wide range of comparison rates. The broad definition of Program-Related Expenses also accounts for the large variance in figures found in other states. For these reasons, we cannot strongly suggest a factor based on these primary data sources.

Provider survey results

Our survey captured Program-Related Expenses by service buckets. These results have been provided below in Table 8, as a percent of wages.

Table 18: Survey Results for Program Related Support

Component	Day	Residential	Unit based with programming	Unit based without programming	All service categories
Program related support, % of wages	5.4	4.4	5.8	2.9	5.9

Recommendation

We believe the survey results in Table 8 should be used to form the basis of our recommended. These results are given as a percent of wages, and will need to be translated to fit into the framework models. Since Program Related Support is applied at the same point in the rate frameworks as Standard G&A and Utilization and Absence, they need to be considered concurrently. This section will cover the translation for these 3 cost components, and the survey results will be reported within the respective sections of this report. These 3 components combined will be referred to as Program Related Expenses.

The first step in converting this factor is to aggregate our wage based recommendations to form a total Program Related Expenses factor, by service bucket. This is displayed below in Table 9.

Table 19: Combined results for program related expenses, as a percent of wages

Component	Day	Residential	Unit based with programming	Unit based without programming	All service categories
Standard G&A, % of wages	23.0	23.0	23.0	23.0	23.0
Utilization and absence, % of wages	3.1	2.2	7.5	3.9	3.9
Program related support, % of wages	5.4	4.4	5.8	2.9	5.9
Combined program related expenses, % of wages	31.5	29.6	36.3	29.8	32.8

$$PRE_{Total\ Cost} = \frac{1}{\{[(1+ERE) \times (1+ CPS) + FAC_{Wage}] / PRE_{Wage}\} + 1}$$

Formula Key

$PRE_{Total\ Cost}$ = Program Related Expenses as a percent of Total Cost (to match framework calculation)

PRE_{Wage} = Program Related Expenses as a percent of wages (from Table 11)

ERE = Employee Related Expenses

CPS = Client Program and Supports

FAC_{Wage} = Facility Costs divided by direct wages (only applicable for Day Services)

Note: For Residential Foster Care, CPS is a flat annual amount of $2179. This should be converted to a daily amount by dividing by 365, then applied as a percent of wages, as follows:

$$PRE_{Total\ Cost} = \frac{1}{\{[(1+ERE) \times + (CPS_{Daily}/Wages)] / PRE_{Wage}\} + 1}$$

Due to the current methodology in the frameworks, the following formula needs to be applied to the wage based Program Related Expenses (shown in Table 9).

Since our recommended costs vary by bucket, we have calculated recommended Program Related Expenses as a percent of total cost using one model for each service bucket, as follows:

- Day: Adult Day Care Services – Daily Training and Habilitation (DT&H)
- Residential: Supported Living Services
- Unit-based with Programming – Independent Living Skills
- Unit-based without Programming – Personal Support/Adult Companion

By applying our formula above with other inputs from the current factors, by corresponding service framework model, Table 10 includes our combined Program Related Expenses, expressed as a percent of the total cost.

Table 20: Recommendations for program related expenses, as a percent of total cost

Component	Day	Residential	Unit based with programming	Unit based without programming	All service categories*
Program related expenses, % of total cost	17.2	18.8	21.3	18.2	19.6

NOTE: The "all service category" figure (19.6 percent) was calculated using the same inputs as the Unit-based framework models.

Facility

Definition

This component covers the cost of facility usage in providing Day services.

Primary data results

The Minnesota DHS currently uses a rate of $19.30 per week, per member for facility use, only applied to Day services. The most prevalent comparison for facility use in other states is reflected as an amount per direct hour of care, which suggest a rate of $0.80 per direct care hour. This rate has a different denomination but fits most closely with the present Minnesota framework for HCBS. Also, many available resources suggest a given square-footage and cost per square-foot, which are not considered within the current Minnesota rate framework.

Provider survey results

Facility use currently is only applied within the day services framework. The survey results indicate that facilities cost 5.9% of wages within day services.

Recommendation

We recommend Minnesota implement a Facility factor of $.80 per direct care hour, or an equivalent daily or weekly rate.

Transportation

Definition

In Residential services, transportation covers the cost of the vehicle. In Day services, DT&H transportation covers the cost of the vehicle, mileage, and time.

Primary data results

We reviewed the way that transportation costs are captured across a variety of states to offer insights on the optimal methodology to be applied in Minnesota. Developing a methodology that adequately captures transportation costs is challenging because of the variety of ways in which transportation vehicles are used to provide HCBS and the different types of vehicles required for different services. Although the types of vehicles and their use vary significantly, transportation costs generally fall into three different categories: purchase cost, variable usage cost (based on mileage), and maintenance costs. In some instances, variable usage costs include costs associated with ongoing vehicle maintenance. We believe that a rate-setting methodology should reimburse costs for these categories.

Some other states have captured transportation costs by applying IRS Standard Mileage rates. Two drawbacks to using this approach are that it may (1) incentivize discretionary transportation and (2) incur more costs for the state. In addition, mileage reimbursements ideally should vary by vehicle type. Standard vehicles have greater fuel efficiency and lower maintenance costs than do specialized vehicles.

For Day services, tiered transportation rates are used based upon the following criteria: (1) the use and requirement of a lift, (2) whether the vehicle is shared, and (3) the mileage driven. We suggest the individual tiered rates have an average mileage rate that is equal to or above the Minnesota Management & Budget rate of $0.54 per mile, where personal vehicles are used and a lift is not required. This will cover the costs associated with vehicle and travel. The Minnesota Management suggested rate is based on the standard IRS rates. To ensure that rates adequately reflect the fluctuating nature of vehicle related transportation costs, it is suggested that an annual review of the updated Minnesota Management & Budget rate is performed and assessed if rate adjustments are warranted. If Minnesota Management & Budget has not released an update rate

at the time of review, the IRS Standard mileage rates would be a reasonable substitution for comparison. This combined method with rates above the state mileage rate helps to address concerns about mileage and time required for extended driving distances for services provided in rural or remote areas.

For Residential services, we suggest a flat annual amount for residential and adapted vehicles for the residential population, with additional mileage-based reimbursement to account for number of hours and the distance traveled. Other state Medicaid agencies frequently use mileage reimbursement models, and these most commonly take into consideration the greater demands in vehicles for people receiving similar services.

Provider survey results

Through the survey, we gleaned some observations that may be useful to MN DHS for consideration in determining how to reimburse providers for their transportation costs. One of our questions inquired about the mileage reimbursement rate providers pay staff for transportation using their own vehicles. While some providers reimbursed at lower mileage rates, the median reimbursement level was $0.54 per mile. In addition, our survey captured both the cost of new vehicles as well as maintenance costs. Of all costs reported, maintenance cost 80.1 percent, and the remaining 19.9 percent was spent on new vehicles. Based on individual responses, the cost to purchase a vehicle vary greatly depending on the size, function and type of vehicle.

We also gathered data regarding the types of vehicles used by providers, at the service level. Table 11 below shows the counts of vehicles with and without lifts, for those who responded that they provided vehicles for use. Survey responses were not captured for Residential since they are currently reimbursed as a flat rate, regardless of vehicle type.

Table 21: Survey counts for vehicle type by service category

Component	Day	Unit based with programming	Unit based without programming
Vehicles with lifts	45	12	22
Vehicles without lifts	15	23	18
Total vehicles	60	36	40

Recommendation

The current framework does not appear to adequately differentiate for the different types of transportation required and the vehicles used in providing HCBS. From the provider survey, we have learned that the transportation costs vary significantly based on the type of vehicle used and the nature of the transportation. Based upon our research and provider survey, we cannot make specific recommendations to update the current framework values.

Caveats, limitations, and additional considerations

The following caveats, limitations and additional considerations apply to this study and have been addressed below.

Unknown future changes in cost

We provide recommendations for the rate-setting framework that reflects non-wage costs as they currently are, but future changes in HCBS costs may make the current framework inaccurate over time. This study is contemporary and descriptive in scope and not prospective or predictive. We recommend that a similar study be conducted every 3–5 years to maintain a current perspective on costs.

Variation by other factors

Our intent was to focus our analysis on all non-wage cost components that we identified. Additionally, we examined these cost components on the basis of service bucket, provider size, and geography, because those are the categories that we identified as the principle drivers of variation among HCBS providers throughout Minnesota, as confirmed by previous research on this topic. It is possible that we overlooked other factors that are have a substantial influence on cost variance. However, throughout our research process and our consultation with stakeholders, we confirmed that the cost drivers we chose are valid and we believe that we did not miss other potential drivers. This concern was addressed specifically during our focus group sessions and was corroborated by all available cost reports.

Provider reporting of costs

Although the survey captured costs from some providers, there is potential for significant improvement in the accurate representation of the nuances in costs across all HCBS providers. In the future, Minnesota may want to consider a reporting mechanism to track accurate costs. This would provide Minnesota with a breakdown of all costs for all providers and would allow the Minnesota DHS to discern how costs vary by service type, provider size, and geography.

Additional considerations

During the course of our research, we developed some observations that Minnesota DHS may want to take into consideration:

- **Future changes to frameworks.** Where possible, the recommendations in this report were made in light of the order of operations applied in the current rating framework. If the rating methodology were to change, the recommendations in this report likely would not be valid.
- **Capacity.** We recognize that many facilities or providers do not always operate at full capacity, and therefore some costs are not reimbursed. In our survey, several participants commented that capacity issues presented a significant challenge to collecting adequate revenue to cover expenses. This study was designed specifically to ascertain how best to reimburse providers for the costs incurred to provide HCBS. However, some consideration should be given to providers who are not able to operate at capacity, but provide valuable services. Particularly providers in remote locations, this may be true as they play a critical role in providing access to populations in remote areas, but may not be able to provide the volume of services to generate adequate revenue.
- **Inflation.** Although base wages were not addressed in this study, because wages serve as the basis for cost reimbursements, a wage inflation factor should be considered periodically in order to keep reimbursements in line with cost-of-living adjustments and general inflation.

- **Transportation Costs.** Our research and provider survey offered several useful insights into how to improve the framework structure to accommodate transportation costs. However, we believe a separate study should be pursued in order to better capture the breadth of transportation requirements and their respective costs to provide HCBS.
- **Startup costs for new care recipients.** During our focus group with providers, there was prominent discussion of the additional resources required to onboard new care recipients, which are not currently accounted for in a discreet manner. Furthermore, some organizations with greater administrative resources are more equipped to efficiently handle these responsibilities. This may be an area of further investigation for MN DHS.
- **Provider audit of survey findings.** The survey aims to collect accurate information regarding provider costs; however, by nature, these costs are self-reported and may contain inherent error. We recommend a periodic audit of provider costs to validate that the submitted survey results are in line with actual costs, and that costs are being attributed appropriately to account for HCBS. We recommend this audit be done for cost components within the current framework.
- **Time study for Program Plan Support.** As described above in the Program Plan Support section, there is considerable indirect time applied through the staffing ratio adjustments within the frameworks (particularly for Day and Residential services). It is unknown how these staffing ratio factors were determined, and how the indirect time is attributed within the adjustment factors. We recommend a time study to better understand how to appropriately account for the indirect time within each of the service bucket frameworks.