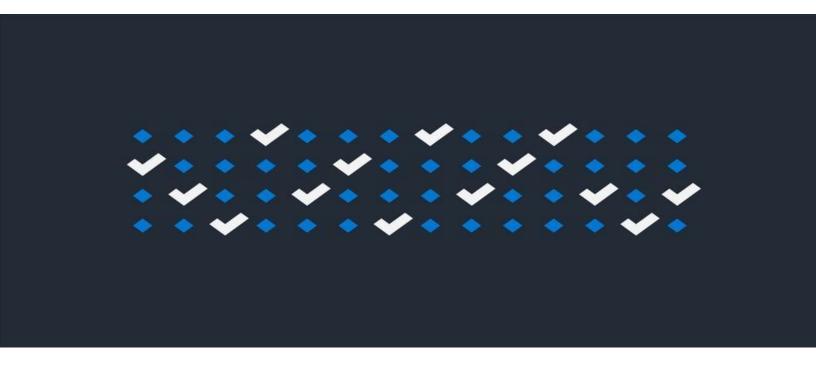
#### MILLIMAN CLIENT REPORT

# Home and Community Based Service Rate Rebase Study

# Mississippi Division of Medicaid

Draft - October 22, 2024

Gwyn Volk, Principal, MA Jill Bruckert, Principal and Consulting Actuary, FSA, MAAA Katarina Lorenz, Consulting Actuary, FSA, MAAA Alyssa Tolbert, Healthcare Consultant Kameron Galm, Healthcare Analyst





# **Table of Contents**

I.	EXECUTIVE SUMMARY	
	RESULTS	
II.	OVERVIEW OF INCLUDED PROGRAMS AND SERVICES	3
III.	NOTABLE WORK CONTRIBUTING TO PAYMENT RATES	
IV.	HIGH LEVEL SUMMARY OF STAKEHOLDER FEEDBACK	
٧.	METHODOLOGY	7
	RATE DEVELOPMENT APPROACH	7
	RATE MODEL COMPONENTS	9
VI.	FISCAL IMPACT	17
VII.	LIMITATIONS AND DATA RELIANCE	18
APPE	ENDIX 1: SUMMARY OF MODELED RATES BY COMPONENT	19
APPE	ENDIX 2: FISCAL IMPACT ANALYSIS OF MODELED RATES BY SERVICE	22
APPE	ENDIX 3: LISTING OF STAKEHOLDERS PARTICIPATING IN PROVIDER WORKGROUPS	26
APPE	ENDIX 4A: DETAILED RATE BUILD-UP EXAMPLE: PER UNIT – NON-FACILITY-BASED	28
APPE	ENDIX 4B: DETAILED RATE BUILD-UP EXAMPLE: PER UNIT – FACILITY-BASED	30
	ENDIX 4C: DETAILED RATE BUILD-UP EXAMPLE: PER DIEM – FACILITY-BASED RESIDENTIAL	
	VICES	
	ENDIX 4D: DETAILED RATE BUILD-UP EXAMPLE: PER MONTH	
	ENDIX 4E: DETAILED RATE BUILD-UP EXAMPLE: PER MEAL	
	ENDIX 5: STAFF TYPES BY SERVICE	
	ENDIX 6: BLS OCCUPATION CODE DESCRIPTION	
	ENDIX 7: BLS WAGES BY STAFF TYPE	
	ENDIX 8A: AL PROGRAM AND INSTITUTIONAL RESPITE SERVICE STAFFING	_
	ENDIX 8B: ID/DD SHARED SUPPORTED LIVING STAFFING	
	ENDIX 8C: ID/DD SUPERVISED LIVING AND CRISIS SUPPORT STAFFING	
	ENDIX 8D: E&D ADULT DAYCARE STAFFING	
	ENDIX 8E: ID/DD AND CSP DAY SERVICES STAFFING	
	ENDIX 9: INDIRECT TIME ASSUMPTIONS	
	ENDIX 10: TRAVEL TIME & MILEAGE ASSUMPTIONS	
	ENDIX 11: PTO & TRAINING TIME ASSUMPTIONS	
	ENDIX 12: ERE ASSUMPTIONS	
APPE	ENDIX 13: FLEET VEHICLE ASSUMPTIONS	63

# I. Executive Summary

Milliman has been engaged by the Mississippi Division of Medicaid (DOM) to conduct a rate rebasing study for the home and community-based services (HCBS) operated by DOM for the following programs:

- 1915(c) Assisted Living (AL) waiver
- 1915(i) State Plan Community Support Program (CSP)
- 1915(c) Elderly and Disabled (E&D) Waiver
- 1915(c) Intellectual Disability and Developmental Disability (ID/DD) Waiver
- 1915(c) Independent Living (IL) Waiver
- 1915(c) Traumatic Brain Injury/Spinal Cord Injury (TBI/SCI) waiver

These programs include in-home, community, residential, and other HCBS, reflecting 90 payment rates which vary by program, service type, support level, and the number of people served per visit.

This rate rebasing study is intended to develop payment rates that are consistent with efficiency, economy, quality of care, and access to care for the target period of July 1, 2025 to June 30, 2026. This rebasing initiative involved:

- Identifying opportunities for cross-program alignment in payment rate assumptions, based on a comprehensive review of program requirements.
- Input from DOM, Department of Mental Health (DMH), and the Mississippi Department of Rehabilitation Services (MDRS) to further understand service requirements.
- Extensive provider engagement with a variety of providers and provider associations including the
  Mississippi Home Care Provider's Association, the Mississippi Association of Adult Day Services, the
  Mississippi Association of Intellectual Developmental Disabilities (IDD) Providers and the Mississippi
  Association of Planning and Development Districts to obtain feedback on service operations and rate
  modeling assumptions.
- Use of an independent rate model (IRM) methodology, which builds rates from the "ground up" by
  determining the costs related to separate components and summing the components to develop a payment
  rate for each service. The IRM approach is generally consistent with legacy DOM HCBS rate methodologies,
  with additional refinements/adjustments to align payment rate assumptions with related service deliver costs.

DOM has indicated that they will use the results of this rate rebasing study to evaluate overall HCBS program funding levels and inform changes to current HCBS payment rates. Any HCBS payment rate changes (which have not been determined as of the time of this report) will be based on DOM, DMH and MDRS policy decisions and related legislative appropriations. DOM anticipates incorporating any payment rate changes into the applicable 1915(c) waiver amendments or 1915(i) state plan amendments for CMS approval, which would include the required public comment period.

#### **RESULTS**

The overall fiscal impact of the rate rebasing was a 7.5% increase from current expenditures across programs, estimated using SFY 2022 utilization and current payment rates as compared to the rebased rates. In-home and residential care services represented the majority of this increase, as illustrated in Figure 1.

FIGURE 1: FISCAL IMPACT ANALYSIS FOR ALL DOM HCBS PROGRAMS AND SERVICES

	ESTIMATED PAYMENTS (IN MILLIONS)		ESTIMATED FISCAL IMPACT (IN MILLIONS)	
STATE AGENCY SHARE	CURRENT RATES	REBASED RATES	DOLLAR CHANGE	PERCENT CHANGE
Total Across Programs (State Share Only)	\$172.4	\$185.2	\$13.0	7.5%
DOM (AL, CSP, and E&D)	\$93.0	\$98.2	\$5.3	5.7%
DMH (ID/DD Only)	\$51.7	\$57.3	\$5.7	11.1%
MDRS (IL and TBI/SCI)	\$27.8	\$29.7	\$1.9	7.0%
Total Across Programs (State & Federal Share)	\$754.8	\$811.0	\$56.7	7.5%
In-Home Services	\$467.3	\$494.6	\$27.7	5.9%
Community Services	\$103.8	\$113.3	\$9.4	9.1%
Residential Services	\$114.7	\$130.0	\$15.3	13.4%
All Other Services	\$68.9	\$73.1	\$4.2	6.2%

1

#### MILLIMAN REPORT

Notes: State share assumes a 77.16% Federal Medical Assistance Percentage (FMAP) for SFY 2026. Totals may not tie due to rounding

The report provides an in-depth description of the IRM approach, methodology, and assumptions used to develop the rebased payment rates. Appendix 1 provides a listing of rebased payment rates including a breakdown by payment rate component with Appendix 2 providing fiscal impact estimates by service and program. The remainder of the appendices provide additional detail, as described throughout in this report.

2

# II. Overview of Included Programs and Services

DOM administers all six HCBS programs included in this rebasing, which are statewide, operated via fee-for-service (FFS), and include in-home, community, residential and other HCBS (Figure 2 provides a summary). These programs are operationalized as follows:

- DOM operates the AL and E&D waivers and is legislatively appropriated the state matching funds for services in these waivers as well as the CSP.
- DMH operates the ID/DD waiver and CSP and is legislatively appropriated the state matching funds for services on the ID/DD waiver.
- MDRS operates the IL and TBI/SCI waivers and is legislatively appropriated the state matching funds for services on these waivers.

As operating agencies who are responsible for collaborating in the development of service and provider qualifications, both DMH and MDRS were engaged on a regular basis throughout the rate rebasing process to provide input on payment rate assumptions to support appropriate consistency in assumptions across services/programs. Services by program that are a part of the HCBS payment rate rebase project are summarized in Figure 2.

П	2: SERVICES	INCLUDED	IN DATE DEC	2 V GINIC

Program	Residential	In-Home	Community	All Other
AL	AL     TBI residential	N/A	N/A	N/A
IL	N/A	Personal care attendant	N/A	N/A
TBI/SCI	Respite: Institutional	Personal care attendant     Respite: In home     companion, in home nursing     (separate payment rates for     licensed practical nurses     (LPNs) and registered     nurses (RNs))	N/A	N/A
E&D	Respite: Institutional	<ul> <li>Personal care services</li> <li>Private duty nursing (separate payment rates for LPN and RNs)</li> <li>Respite: In home</li> </ul>	Adult daycare (include separate payment rates for low support and high support clients for DOM's consideration)	Case management     Home delivered meals     Community transition services (pre and post)     Medication management (separate payment rates for initial and follow-up)
ID/DD	Shared supported living (low to high support) Supervised living (low to high support, <4 beds, 4+ beds) Medical supervised living Behavioral supervised living Crisis Support (ICF/IID)	Home and community supports (1-3 people)     Supported living (1-3 people)     Respite: In home (1-3 people), nursing (separate payment rates for LPN and RNs)	Day services adult (low to high) Prevocational services (low to high) Job discovery Job development Supported employment – job maintenance (1-3 people) Respite: Community	<ul> <li>Support coordination</li> <li>Crisis intervention</li> <li>Behavioral support evaluation</li> <li>Behavioral support specialist</li> <li>Behavioral support consultant</li> </ul>
CSP	N/A	<ul> <li>Supported living (1-3 people)</li> <li>Respite: In home (1-3 people)</li> </ul>	Day services adult (low to high)     Prevocational services (low to high)     Job development     Job maintenance	Targeted case management

# III. Notable Work Contributing to Payment Rates

The DOM HCBS rate rebasing project reflects intensive work with DOM, DMH, MDRS and provider workgroups to better understand the costs associated with the delivery of the HCBS, in addition to the collection and analysis of a wide range of relevant data sources, as described below.

**Cross-agency engagement:** Discussions were held with DMH and MDRS subject matter experts throughout the rate rebasing project to gain their input on rate modeling assumptions and ensure compliance with program requirements.

**Provider workgroup feedback:** A representative group of providers and provider associations including the Mississippi Home Care Provider's Association, the Mississippi Association of Adult Day Services, the Mississippi Association of IDD Providers and the Mississippi Association of Planning and Development Districts were engaged as part of a provider workgroup series, with 13 workgroup meetings held over the rate rebasing initiative, specifically:

- September and October 2023: 11 total meetings that included an overview of the rate rebasing process and
  rate methodology, obtaining provider feedback on current rate structures and potential payment rate
  assumptions, and reviewing hourly wage and turnover results from the Mississippi Workforce Study.
  Meetings were specific to each service type and program.
- February 2024: Three follow-up meetings to present and obtain input on draft payment rate assumptions. Meetings were specific to each service type and program.
- October 2024: Final meeting with all workgroup members to deliver an overview of the report and inform workgroup members of DOM's anticipated next steps.

Appendix 3 provides a listing of stakeholders included in the workgroups described above.

Regulatory review: Review of existing Mississippi service and provider requirements including:

- Mississippi Administrative Code<sup>1</sup>
- 1915(c) waiver renewals and 1915(i) state plan amendments for applicable programs
- DMH Operational Standards<sup>2</sup>
- Assisted Living Minimum Standards<sup>3</sup>
- Inventory for Client and Agency Planning (ICAP) scoring for residential, day services, and prevocational services

#### Mississippi HCBS expenditures, utilization and provider cost data:

- Claims data: DOM's HCBS CY 2021 claims data (most recently available at the time of analysis) was summarized to understand historic service utilization and payments.
- Utilization data: DOM's HCBS SFY 2022 372 report data was collected to understand recent utilization experience.
- Mississippi Workforce Study: Review of data collected in calendar year (CY) 2022 as part of a provider
  workforce study performed by Mississippi State University National Strategic Planning and Analysis
  Research Center. The results of the Mississippi Workforce Study were considered when developing wage
  and employee benefit assumptions.
- *Mississippi-specific provider data collection:* Additional data collection activities were performed for home delivered meals, transportation, and E&D adult day care service types.

**Publicly available wage and employee benefit data**: The following data sources were used to identify wage and benefit payment rate assumptions; the *Methodology* section of this report provides additional detail.

• May 2023 Bureau of Labor Statistics (BLS) Mississippi-specific wage data<sup>4</sup> – used to inform direct care work wage levels. This BLS data contains state-specific information that is updated on an annual basis and is

<sup>&</sup>lt;sup>1</sup> Mississippi Division of Medicaid. Part 208 of Title 23 Mississippi Administrative Code Home and Community Based Services Long Term Care. Retrieved from https://medicaid.ms.gov/wp-content/uploads/2023/09/Title-23-Part-208-HCBS-LTC-eff.-9.1.23.pdf

<sup>&</sup>lt;sup>2</sup> Mississippi Department of Mental Health. (September 1, 2020) Operational Standards for Mental Health, Intellectual/Developmental Disabilities and Substance Use Community Service Providers. Retrieved from https://dmh.ms.gov/wp-content/uploads/2020/08/Final-DMH-2020-Operational-Standards-7-31-20.pdf

<sup>&</sup>lt;sup>3</sup> Mississippi Division of Medicaid. Minimum Standards for Personal Care Homes Assisted Living. Retrieved from https://msdh.ms.gov/msdhsite/\_static/resources/341.pdf

<sup>&</sup>lt;sup>4</sup> U.S. Bureau of Labor Statistics. (May 2023) *May 2023 State Occupational Employment and Wage Estimates.* Retrieved from https://www.bls.gov/oes/current/oes\_ms.htm

collected and reported in a consistent and statistically credible manner. The BLS wage data reports wages and salaries by percentile across Standard Occupation Classifications (SOCs).

- Federal Reserve Economic Data (FRED) Mississippi-specific monthly wage data for staff in private education and health services<sup>5</sup> used actual wage reporting as of April 2024 and forecasted wages into June 2025 to inform wage trend assumptions.
- March 2023 BLS Employer Cost for Employee Compensation (ECEC) information<sup>6</sup> used for the development of employee related expense (ERE) assumptions.

**Current payment rates and related payment rate assumptions:** We used current payment rates to develop fiscal impact estimates, which reflected updates for inflation performed by the Milliman team that went into effect in July 2023 for the 1915(c) waivers and in November 2023 for the 1915(i) program. We also reviewed payment rate assumptions included in program-specific payment rate updates performed since 2012; Figure 3 provides additional detail regarding the timing of payment rate updates across Mississippi's HCBS programs.

#### FIGURE 3: DOM HCBS PAYMENT RATE UPDATES BETWEEN 2012 AND 2023

SCOPE	TIMING
All waivers and 1915(i) services – updates for inflation	2023
Appendix K rate increases in response to the COVID-19 pandemic	2020
ID/DD and CSP services – rate rebase	2018
AL waiver services rate rebase	2018
E&D waiver rate rebase of adult daycare, personal care services, in-home respite, case management, transition care management (also known as community navigator service)	2017
IL Waiver rate rebase of personal care services and case management	2017
TBI/SCI waiver rate rebase of personal care services and case management	2012

<sup>&</sup>lt;sup>5</sup> Federal Reserve Economic Data. (April 2024) Average Hourly Earnings of All Employees: Education and Health Services: Private Education and Health Services in Mississippi. Retrieved from https://fred.stlouisfed.org/series/SMU28000006500000003

<sup>&</sup>lt;sup>6</sup> U.S. Bureau of Labor Statistics. (March 2024) *Employer Cost for Employee Compensation – March 2024*. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf

# IV. High Level Summary of Stakeholder Feedback

Milliman and DOM collected stakeholder feedback on key aspects of the HCBS included in this study. Figure 4 below highlights the key themes of stakeholder feedback received via stakeholder engagement efforts as part of the provider workgroup meetings, and a limited scope provider data collection tool.

#### FIGURE 4: KEY THEMES FROM STAKEHOLDER ENGAGEMENT

TOPIC	KEYTHEMES
Workforce Dynamics	<ul> <li>Staffing and stabilization of workforce has been a challenge and have been exacerbated by the COVID-19 pandemic.</li> </ul>
	Wage rates are not keeping up with inflation across all staff levels.
	<ul> <li>Individuals receiving public benefits make decisions regarding employment based on whether the employment will result in a loss of those benefits.</li> </ul>
	<ul> <li>Assisted living facilities have encountered issues with candidate no-shows for scheduled job interviews and an inability to staff programs.</li> </ul>
	<ul> <li>Employers in other industries offer higher wages and benefits for roles with similar credential requirements, resulting in a decline in the available workforce for these positions.</li> </ul>
	Nursing staff is in particularly high demand and difficult to hire and retain.
	<ul> <li>Individuals with complex needs and high behavioral health needs require more staffing on average either due to medical needs or due to choice of daily activities.</li> </ul>
Transportation associated costs	<ul> <li>Fuel and vehicle purchasing and maintenance costs have increased and are challenging to cover with existing funding levels.</li> </ul>
	Vehicle insurance is difficult to obtain and is costly.
	<ul> <li>There is an overall need for additional clarification regarding what is included in the transportation component of the adult day service rate, particularly for the CSP and ID/DD community-based services given individuals have a range of choices in terms of where and how they engage in services.</li> </ul>
	<ul> <li>Transportation resources are shared across multiple programs for some providers making it difficult to isolate transportation costs for specific services.</li> </ul>
Regulatory requirements	<ul> <li>There are increased costs related to meeting federal regulatory requirements specific to participant choice and integration into the community. For example, increased participant choice has resulted in the need for additional staffing and more one-on-one staffing needs.</li> </ul>
Administrative costs	<ul> <li>Overall concerns regarding the ability of current funding levels to cover administrative and program support costs.</li> </ul>

Stakeholder engagement was critical in the development of rate modeling assumptions and additional details on how provider feedback was used are summarized throughout the remainder of this report.

6

# V. Methodology

#### **RATE DEVELOPMENT APPROACH**

We used an independent rate model (IRM) approach to calculate the average costs that a reasonably efficient provider would be expected to incur while delivering the services discussed in this report. This approach determines the costs related to the individual components shown in Figure 5 and sums the component amounts to derive a rate for each service. Rather than relying on actual costs incurred from a prior time period to determine what the rates should be, the IRM approach builds rates from the "ground up" and considers what the costs may be to provide the service based on a set of assumptions. This approach provides transparency to rates and includes clear and concise documentation of the rate development process, where each component can be independently reviewed and assessed. The identification of assumptions by individual rate model component allows for easy updates to accommodate the ever-changing healthcare landscape and regulatory environment.

The IRM approach can be distinguished from other provider payment methodologies in that it estimates the average costs for each service given the resources (salaries and other expenses) reasonably expected to be required as part of delivering the service. By contrast, many cost-based methods rely primarily on the historical costs incurred while delivering services, which can be affected by operating or service delivery decisions made by providers. These operating or service delivery decisions may be inconsistent with program service delivery standards or be caused by program funding limitations that do not necessarily consider the average resource requirements associated with providing these services.

To the extent provider rates are affected by external factors, such as legislatively mandated funding levels that are not consistent with factors that drive the market, the IRM approach also provides a means to communicate what costs may reasonably be incurred, and the issues faced by providers, so decision makers can more equitably allocate resources based on this information.

A detailed description of each of the IRM components is provided in Figure 5. The first two components – direct care staff and supervisor salary and wages, and employee related expenses (EREs) – comprise the largest portion of the expected costs built into the rate models. We have excluded room and board expenses from the rebased payment rates as these expenses are not allowed for Medicaid payment per federal Medicaid regulation.

FIGURE 5: INDEPENDENT RATE MODEL COMPONENTS

COMPONENT	ELEMENTS	SUB-ELEMENTS	CLARIFYING NOTES
		Direct time	Corresponding time unit as defined on the fee schedule     Adjusted for staffing ratios for some services, i.e., more than one person served concurrently
		Indirect time	Non-billable time for direct care workers as part of required service planning, note taking, and preparation time as well as time being supervised.
Direct Care Staff and Supervisor Salaries and Wages	Transportation time	Non-billable time for direct care workers related to travel as part of the service including:  Travel time directly transporting the client  Travel time performing chores or tasks for the client when the client is not present  Travel time between services  This time is only included as a rate modeling assumptions if it is time that is required for the service, paid by providers to staff, and cannot be billed separately.	
		Paid time off (PTO) and training time	Includes vacation, holiday, and sick time. Training assumptions include both ongoing employee training as well as new hire training time attributable to employee turnover.
		Supervisor time	Accounted for using a span of control variable that represents the average number of direct care workers each supervisor oversees.
	Wage rates	Can vary for overtime (OT) and holidays worked differentials	Wage rates vary by direct care staff type.  Staff wages include a time and a half (1.5 factor) increase for time associated with average OT or holidays worked.

COMPONENT	ELEMENTS	SUB-ELEMENTS	CLARIFYING NOTES
Employee Related Expenses	Payroll-related taxes and fees	Federal Insurance Contributions Act (FICA), Federal Unemployment Tax Act (FUTA), State Unemployment Insurance (SUI), Workers Compensation	Applicable to all employees, and varies by wage level assumption
	Employee benefits	Health, dental, vision, life and disability insurance, and retirement benefits	Applicable to most employees, with some TBI/SCI and IL staff exceptions.  Benefit amounts may vary by staff type.
Transportation	Vehicle operating expenses	Includes all ownership and maintenance-related expenses	Varies by service with costs estimated based on either the federal reimbursement rate or fleet vehicle estimated costs.
Administration, Program Support, Overhead	All other business-related costs	Includes program operating expenses, including management, accounting, legal, information technology, etc.	Excludes room and board expenses as these expenses are not allowed for Medicaid payment per federal Medicaid regulation.

We used four different rate model approaches to develop the rebased rates, described in Figure 6. The rate model assumptions described throughout this report differ by the model type but include each of the core components of the IRM as described in Figure 5. Appendices 4a to 4e provide examples of the detailed rate buildup for each rate model approach included in this rate rebase.

UNIT TYPE	OVERALL DESCRIPTION	SERVICES INCLUDED
Per Unit – non-facility-	<ul> <li>Generally used for services that have a defined time (minutes or hours) per billed services as part of a fee schedule.</li> </ul>	All in-home services
based		Employment services including:
	<ul> <li>Includes most services except for facility-based services such as residential, adult day/prevocational/community respite</li> </ul>	o Job discovery
	services, as well as case management and home delivered meals services.	o Job development
	- Typically, and primary warker is availed to provide the comice	<ul> <li>Supported employment – job maintenance</li> </ul>
	<ul> <li>Typically, one primary worker is expected to provide the service overseen by a supervisor.</li> </ul>	Community transition services (CTS)
	<ul> <li>For services such as crisis intervention, behavioral support, or supported living services, multiple direct care staff may be involved in providing the services with one primary</li> </ul>	Medication management
		Crisis intervention
	person providing the service and several specialized staff supporting in various levels of involvement.	Behavioral support (evaluation, specialist, consultant
Per Unit – facility-based	<ul> <li>Used for community services that are provided in a facility- based setting with a team of staff providing the service.</li> </ul>	E&D program:
,		<ul> <li>Adult daycare</li> </ul>
	<ul> <li>The payment rate is developed by dividing the average assumed daily costs of the service by the average number of</li> </ul>	ID/DD and CSP:
	Medicaid attendees and average units billed per person per day.	o Day services adult
		<ul> <li>Prevocational services</li> </ul>
		o Community Respite (ID/DD only)

UNIT TYPE	OVERALL DESCRIPTION	SERVICES INCLUDED
Per Diem – facility-based residential services	<ul> <li>Used for services provided in a facility-based setting with a team of staff providing the service on a 24 hour, 7-days a week basis.</li> <li>The payment rate is developed by dividing the average weekly costs for Medicaid enrollees by 7 days and the average number of daily users of the service.</li> </ul>	AL
Per Month	<ul> <li>Used for case management services as defined by the fee schedule billing unit.</li> <li>The payment rate is developed by dividing the average monthly service costs for a single staff member or team of case managers by the average number of Medicaid enrollees on their case load.</li> </ul>	<ul> <li>E&amp;D case management</li> <li>ID/DD support coordination</li> <li>CSP targeted case management</li> </ul>
Per Meal	<ul> <li>Used for the E&amp;D home delivered meals service only, as defined by the fee schedule billing unit.</li> <li>The payment rate is developed by adding Trio contracted single meal, delivery costs, and administrative and program support load to represent the final rate.</li> <li>More details can be found earlier in this report in the "Other Service Specific Considerations" section.</li> </ul>	E&D home delivered meals

#### **RATE MODEL COMPONENTS**

This subsection provides a description of the key rate components listed in Figure 5, which are:

- Direct care staff and supervisor salary and wages
- Transportation
- Employee related expenses
- Administration, program support, and overhead

#### **Direct Care Staff and Supervisor Salary and Wages**

The direct care staff salary and wage component is typically the largest component of the payment rates, comprising the labor-related cost, or the product of the time and expected wage rates for the direct care staff and supervisors who deliver each of the services.

<u>Identification of staff types:</u> There are a wide range of staff types authorized to provide HCBS to enrolled individuals (e.g., frontline worker, frontline worker supervisor, case manager/support coordinator, licensed practical nurse, registered nurse). To appropriately reflect the various provider qualification and credential requirements across services, we developed a set of "staff types" based on similar characteristics, such as educational degrees, professional credentials, and expected wage rates. We then identified the relevant staff type(s) for each service. In certain cases, a service involves multiple staff types (e.g., services that utilize a shift-based approach to service delivery such as adult day services). Appendix 5 provides a list of the staff types applicable for each service.

<u>Identification of hourly wages by staff type:</u> We developed hourly wage for each staff type using Mississippi-specific BLS wage data effective as of May 2023 as the primary wage data source (the most recent BLS data available at the time of analysis). We aligned SOC codes and BLS wage percentiles by staff type based on position responsibilities, a review of SOC code descriptions, feedback from DOM, DMH and MDRS and provider workgroup discussions, and a review of wages reported in the Mississippi Workforce Study.

For certain staff types, BLS SOCs directly correspond to the direct care staff providing the service, such as licensed practical nurse (LPN), registered nurse (RN), pharmacist, physician, and psychiatrist staff. However, for other staff types. BLS does not publish an occupational code that directly corresponds to the staff type providing the service. For these staff types, we grouped relevant BLS occupation codes together and blended the occupation wage data using a weighting for each selected occupation. We determined the BLS occupation codes and weighting within each staff type based on review of the requirements and qualifications for each DOM service and the BLS occupation code descriptions, along with consideration of workforce study results, and DOM, DMH, MDRS, and provider workgroup feedback received related to BLS occupations.

We trended wages forward for 31 months to reflect anticipated wage level changes from the May 2023 BLS data to the anticipated rate effective period midpoint of December 31, 2025. We selected an annual trend factor of 4.0% to represent anticipated wage growth based on monthly FRED reports for Mississippi in the education and health services with actual wage reporting as of April 2024 and forecasted wages into June 2025.

Appendix 6 provides a description of each BLS SOC used in wage identification, and Appendix 7 illustrates wage percentile selection and total wages after incorporation of occupation weighting and trend.

Staff Time Assumptions: In the IRM approach, staff time is generally categorized as direct time, indirect time, transportation time, and supervisor time. Indirect and transportation time is only included as a rate modeling assumption if it is time required of staff that cannot be billed separately by the provider. Adjustments for PTO, holidays, and OT are also incorporated. Figure 7 below provides a description of each of these sub-elements and related adjustments.

TIME SUB-ELEMENT	DEFINITION	ASSUMPTIONS
Direct	<ul> <li>Amount of billed time incurred by direct care staff per unit of service</li> <li>Examples of the most common unit types, which vary by service, are a set number of minutes per service unit (e.g., 15-minute, 30-minute, 60-minute), per day, or per month.</li> </ul>	Consistent with service billing units, if defined.  Services with a per day or per month billing unit relied on staffing by shifts or available working hours in a month. Appendix 8a to 8e provides shift-based staffing assumptions used in rate modeling for the following services: Assisted living; TBI residential; institutional respite; shared supported living; supervised living (4 beds or fewer, 5 or more beds, medical behavioral and crisis support); E&D adult daycare; and ID/DD & CSP adult day prevocational, and community respite.  For service units that do not have a defined billing unit such as E&D medication management, ID/DD daily crisis intervention, and ID/DD behavioral support evaluation, we developed rate model direct time assumptions based on input from DOM subject matter experts and provider workgroup feedback.
Indirect	<ul> <li>Time that must be spent by non-supervisory direct care staff as part of provision of the service, but is not spent "client facing", and does not result in a billable unit of service.</li> <li>Time incurred for necessary activities such as planning, summarizing notes, updating medical records, and other non-billable but appropriate time not otherwise included in direct care staff direct time.</li> <li>We calculated indirect time using a percent of direct time approach.</li> </ul>	<ul> <li>Indirect time assumptions vary depending on the service; Appendix 9 provides a service-specific summary. Indirect time assumptions do not apply to services relying on shift-based staffing to identify staff time (Appendix 8a to 8e), as this approach includes direct and indirect time.</li> <li>We identified indirect time assumptions based on discussions with DOM subject matter experts and provider workgroup members.</li> <li>Per DOM feedback, E&amp;D CTS Transition services do not include an indirect time assumption as all time staff spend related to the provision or documentation of this service is billable.</li> </ul>
Transportation	Reflects travel time by direct care workers that does not result in a billable unit and reflects activities such as:  Travel time directly transporting the client  Travel time performing chores or tasks for the client when the client is not present  Travel time between services	Transportation time assumptions were developed based on either:  Estimates of average distance driven per service, or  Amount of time it takes to travel that distance  Services relying on shift-based staffing to identify staff time (Appendix 8a to 8e) do not have separate travel time assumptions as shift-based staffing includes all time spent by direct care staff.  We identified travel time assumptions based on input from DOM subject matter experts, provider workgroup feedback via workgroup meetings and targeted data collection, and prior rate development assumptions.

Factor

TIME SUB-ELEMENT	DEFINITION
PTO and Training Adjustment	<ul> <li>PTO ir sick tin workin</li> </ul>

off.

# PTO includes time related to paid vacation, holiday, sick time, or other relevant time where staff are not working but are still receiving paid wages for the time

- Training time includes two components:
  - Annually required training and/or conference time incurred by direct care staff and supervisors, where staff are being paid wages for this time.
  - One-time training/onboarding for new staff, which includes an adjustment for the assumed turnover rate.

#### **ASSUMPTIONS**

- Appendix 10 provides travel time assumptions by applicable service.
- Assumptions vary by staff type and were developed based on input from DOM subject matter experts and provider workgroup feedback.
- PTO assumed by staff type:
  - o Frontline Workers 15 days
  - o All other staff 20 days
- 30 hours of ongoing annual training was assumed for all staff types
- · One-time training/onboarding assumptions:
  - 32% turnover based on the CY 2022 Mississippi workforce survey results
  - o 120 hours for ID/DD and CSP
  - 50 hours for all other programs
- Facility-based community services do not include a PTO and training adjustment assumption and instead include an assumption of the facility hours of operation with staffed time spread over the assumed average billed units per client per day.
- No PTO or annual ongoing training was included in rate modeling for TBI/SCI or IL staff per MDRS guidance.
- Appendix 11 provides the PTO and training adjustment factor by staff type.

#### OT and Holiday Adjustment Factors

 Most services include an adjustment to reflect time direct care staff are being paid time and a half (1.5 factor multiplied by regular wages) for working OT or during holidays.

- A time and a half (or 1.5 factor) assumption is applied to the underlying average hourly wage for staff working OT or during holidays.
  - Residential and facility-based community services include an assumption that all staff work OT 10% of the year in addition to working holidays as noted below.
  - Other services:
    - Frontline workers are assumed to work an average of 7 8-hour days per year of combined holiday or OT days.
    - Frontline worker supervisors are assumed to work an average of 6 8-hour days per year of combined holiday or OT days.
    - All other staff are assumed to work an average of 2 8-hour days per year of combined holiday or OT days.
- Services that do not incorporate a holiday or OT wage increases:
  - All TBI/SCI and IL waiver per MDRS feedback
  - E&D home delivered meals.

#### Supervisor Time

- For most services included in this analysis, direct care staff providing services require supervision. Supervisors are typically more experienced or higher credentialed staff types responsible for the direct oversight of the employees that are providing the services to individuals.
- The primary responsibility of a supervisor is to provide oversight of direct care workers. Supervisor responsibilities may also include the hiring and training of staff, program planning and evaluation, working with families, and working with community members.
- Supervision of direct care staff does not typically result in a separate billable unit of service.
- Supervisor time is determined through application of a "span of control" assumption, which is a measure of

- For non-residential and non-community services, a 1:20 supervisor to direct care worker span of control was assumed in rate modeling.
- Nursing supervision is assumed to be performed by an RN for LPN staff, with a supervisor span of control assumption of 1 RN hour to every 8 LPN hours.
- TBI/SCI and IL in-home services do not include a supervision assumption per MDRS feedback that this time is included as part of a case management service rate that is not within the scope of this rate study.

TIME SUB-ELEMENT	DEFINITION	ASSUMPTIONS
	how many direct care staff members a supervisor can oversee.	
Daily Hours of Operation for Facility-Based Community Services	<ul> <li>Rate modeling reflects the average daily staffed time for all hours of operation, spread over the assumed average billed units per client per day.</li> </ul>	<ul> <li>An assumption that day programs are open for 9 hours daily was included based on data collected from E&amp;D adult day care providers.</li> </ul>

#### **Employee Related Expenses**

This component of rate modeling captures the ERE expected to be incurred for direct care workers and supervisors for each staff type. We calculate ERE as a percentage of direct care worker and supervisor salaries and wages. These percentages vary by staff type, and consist of the following:

- Employer entity's portion of payroll taxes, employee medical and other insurance benefits
- Employer portion of retirement expenses incurred on behalf of direct care workers and supervisors

For purposes of developing the ERE assumptions, we based employer-related payroll taxes on federal and Mississippi-specific requirements. For example, the Internal Revenue Service (IRS) specifies amounts for items such as FICA and FUTA, whereas the state specifies amounts related to SUI. A significant portion of the ERE assumption is driven by the cost of health insurance and retirement benefits the employer provides to its employees.

For health insurance, we adjusted the BLS average hourly health insurance cost for private industry workers to reflect an assumed lower use of health insurance benefits as compared to the national average.

- Nationally, 58% of workers in small firms (3-199 workers) and 60% of large firms (200+ workers) had health insurance coverage, reflecting overall offer rates of 82% and 78% and take up rates of 71% and 76%, respectively (2023)<sup>7</sup>.
- According to the Mississippi HCBS workforce survey report, 31% of workers had medical benefits.
  Workgroup members reported wide variances in the ability to offer insurance and limited take-up of
  insurance, in particular for frontline workers. Workgroup members also reported a high proportion of parttime workers that might not be eligible for health insurance, and MDRS reported that approximately eight
  percent of direct care workers for TBI/SCI and IL waiver in-home services receive health insurance benefits.

The ERE assumptions used the following percentages of the BLS hourly insurance cost for purposes of payment rate development:

- TBI/SCI and IL waiver in-home service staff: 10%
- Other frontline workers: 30%
- All other staff: 50%

For retirement, we adjusted the BLS hourly retirement cost for the BLS private industry workers (all employees) to reflect an assumed lower uptake of retirement benefits as compared to the national average.

- Nationally, 67% of private industry workers have access to defined contribution retirement plans (2023)<sup>8</sup>.
- According to the Mississippi HCBS workforce survey report, approximately 14% of frontline staff received retirement benefits as compared to 18% for supervisors.
- The ERE assumptions used 50% of the BLS hourly retirement cost for all staff.
- TBI/SCI and IL waiver in-home service staff ERE percentage assumptions do not include retirement costs based on feedback from MDRS that staff of these services are not offered benefits.

The detailed calculations related to the ERE percentage are shown by staff type and program in Appendix 12. Figure 8 below describes the data sources and assumptions for each ERE component.

<sup>&</sup>lt;sup>7</sup> Kaiser Family Foundation. (2023). *Employer Health Benefits 2023 Annual Survey*. Retrieved from https://files.kff.org/attachment/Employer-Health-Benefits-Survey-2023-Annual-Survey.pdf

<sup>&</sup>lt;sup>8</sup> U.S. Bureau of Labor Statistics. (2023). Employee Benefits Survey Latest Numbers. Retrieved from https://www.bls.gov/ebs/latest-numbers.htm

#### FIGURE 8: ERE ASSUMPTIONS BY COMPONENT

COMPONENTS	ASSUMPTIONS	SOURCE
Federal Unemployment Tax Act (FUTA)	\$420, 6% of first \$7,000	Internal Revenue Service. Topic No. 759 From 940 – Employer's Annual Federal Unemployment (FUTA) Tax Return – Filing and Deposit Requirements. Retrieved from https://www.irs.gov/taxtopics/tc759
Federal Insurance Contributions Act (FICA)	Employer Social Security Withholding: 6.2% on first \$160,200 Employer Medicare Withholding: 1.45% Total FICA: 7.65% on first \$160,200	Internal Revenue Service. Topic No. 751 Social Security and Medicare Withholding Rates. Retrieved from https://www.irs.gov/taxtopics/tc751
State Unemployment Insurance (SUI)	\$392, 2.8% (average tax rate after 3 years) of first \$14,000	Mississippi Department of Employment Security. Employer FAQs. Retrieved from: https://mdes.ms.gov/employer-faqs/
Worker's Compensation	1.3% calculated as a percentage of Wage and Salaries and Paid Leave components per March 2024 national data.	BLS Employer Cost for Employee Compensation (ECEC) – March 2024. Table 1, Private Industry Workers. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf
Health Insurance	Calculation applies the below adjustments to the BLS average employer insurance cost as reported for private industry workers in the East South Central Region (\$5,525 in average annual employer costs). These adjustments reflect an assumed lower use of health insurance benefits by Mississippi HCBS staff as compared to the national average.  10% for TBI/SCI and IL waiver in-home staff, or \$553  30% for frontline workers, or \$1,658  50% for all other workers, or \$2,763	BLS Employer Cost for Employee Compensation (ECEC) – March 2024.  Table 7, Private Industry Workers. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf
Retirement	1.3%, reflecting 50% of the 2.5% retirement cost as reported by BLS for private industry workers in the East South Central Region. This adjustment reflects an assumed lower use of retirement benefits as compared to the national average.	BLS Employer Cost for Employee Compensation (ECEC) – March 2024.  Table 7, Private Industry Workers. Retrieved from https://www.bls.gov/news.release/pdf/ecec.pdf

#### **Transportation Expenses**

The transportation expense component of rate modeling is intended to capture the average out-of-pocket transportation costs for providers. This expense is included in rate modeling as either a mileage reimbursement if staff are using their own vehicles for service-related transportation or as a cost associated with facilities owning their own fleet vehicles. Facility-based services, such as residential or day services, generally assumed fleet vehicle costs while all other services generally included mileage reimbursement if staff travel is a component of the service delivery that is paid for by providers.

We used the 2024 IRS Federal mileage rate of \$0.67 per mile to identify costs for non-facility-based services. For these services, we converted the estimated travel time into miles using an average number of miles per hour (MPH) developed by weighting county-specific population by rural vs urban travel assumptions determined based on population density from a 2022 county level survey<sup>1</sup> which is summarized in Figure 9.

#### FIGURE 9: CALCULATED WEIGHTED AVERAGE NUMBER OF MPH

AREA CATEGORIES	POPULATION DENSITY	DISTRIBUTION	AVERAGE MPH
Rural	40 people per square mile	18.3%	50.00

<sup>&</sup>lt;sup>1</sup> Mississippi Demographics. (2024). *Mississippi Counties by Population*. Retrieved from https://www.mississippidemographics.com/counties by population

AREA CATEGORIES	POPULATION DENSITY	DISTRIBUTION	AVERAGE MPH
Suburban	Between 40 and 200 people per square mile	50.3%	40.00
Urban	More than 200 people per square mile	31.4%	30.00
Statewide		100.0%	38.68

Miles traveled by staff as part of the provision of the service was determined using input from DOM subject matter experts, provider workgroup feedback, results from targeted provider workgroup transportation data collection, and prior rate modeling assumptions if no other relevant information existed. Appendix 10 summarizes travel time and mileage assumptions for the applicable services.

Fleet vehicle costs for facility-based services, such as residential and day services, were developed using information collected through a transportation-focused data request for relevant provider workgroup members and input from DOM subject matter experts. Through this data collection, we assumed annual cost per fleet vehicle for a facility is \$10,184 with a \$500 per year per vehicle cost add-on for lifted vehicles. Providers also reported around 40% of their fleet as being comprised of lifted vehicles via a transportation data collection activity performed across E&D, ID/DD, and CSP providers. Additionally, to account for gas costs associated with fleet vehicle use, a \$0.27 per mile assumption is also included in the fleet vehicle costs. Appendix 13 summarizes fleet vehicle assumptions for the applicable services.

#### Administration / Program Support / Overhead

The administration, program support, and overhead component is intended to account for the following types of costs:

- **Program support** Costs include supplies, materials and equipment necessary to support service delivery. For day and prevocational services, program support also includes facility space.
- Administration and overhead Generally, administrative related expenses include all expenses incurred
  by the contractor necessary to support the provision of services, but not directly related to providing services
  to individuals. These expenses exclude transportation, wages and ERE for direct care staff and supervisors
  of direct care staff, and may include, but not be limited to those listed below
  - Salaries and wages, and related employee benefits for employees or contractors that are not direct care staff or supervisors of direct care staff
  - Liability and other insurance
  - o Licenses and taxes
  - Legal and audit fees
  - Accounting and payroll services
  - o Billing and collection services
  - o Bank service charges and fees
  - Information technology
  - o Telephone and other communication expenses
  - Office and other supplies, including postage
  - o Accreditation expenses, dues, memberships, and subscriptions
  - o Meeting and administrative travel related expenses
  - o Training tool and employee development expenses, including related travel
  - o Human resources, including background checks and other recruiting expenses
  - Community education
  - Marketing/advertising
  - Interest expense and financing fees
  - Facility and equipment expense for space not used to directly provide services to individuals, and related utilities (excludes room and board per federal Medicaid requirements)
  - Vehicle and other transportation expenses not related to transporting individuals receiving services or transporting employees to provide services to individuals
  - Board of director expenses

Rate modeling reflects the use of a single factor related to administration and program support as a percentage of the total rate which is set by service. We used experience from other state HCBS rate rebasing work to develop administrative and program support assumptions as the *Mississippi Workforce Study* did not collect cost data at the level necessary for the related analysis. Figure 10 provides the administration, program support, and overhead

percentage used for purposes of rate development.

#### FIGURE 10: ADMINISTRATION, PROGRAM SUPPORT AND OVERHEAD ASSUMPTIONS

ADMIN %	NOTES AND RELEVANT SERVICES
25%	Includes the cost for facility space for services and meal cost. These components combined represented 13% of the 2018 rebased payment rate for adult day services (low support).  • Day Services  • Prevocational  • Adult Daycare  • Community Respite
15%	<ul> <li>Residential services (AL, TBI residential, shared supported living, supervised living, medical supervised living, institutional respite)</li> <li>Support coordination and targeted case management</li> <li>Case Management</li> <li>Community transition services</li> </ul>
12.5%	Behavioral supervised living
10%	<ul> <li>Personal care services</li> <li>Home and Community Supports</li> <li>Respite in-home</li> <li>Respite in home nursing</li> <li>Private duty nursing</li> <li>Job discovery, development, maintenance</li> <li>Supported living</li> <li>Medication management</li> <li>Crisis intervention and crisis support</li> <li>Behavioral support evaluation, specialist, and consultant</li> </ul>
5%	Home delivered meals
0%	<ul> <li>Personal care attendant, in-home companion and nursing respite for IL and TBI/SCI programs, which have no administrative load due to MDRS managing many administrative functions.</li> </ul>

#### **Other Service Specific Considerations**

<u>Multiple individuals included per service</u>: ID/DD and CSP offer home and community support, in-home respite, and supported living where multiple individuals can be included as part of one service. For these services, the provider will still bill for each member visited, but DOM pays a reduced rate per person to reflect that staff time is shared across multiple people. A downward factor is applied to the single person rate to get to the multiple person rate and the formula used to develop this factor is as follows:

Multiple person rate = single person rate \* (1 + (0.25 \* # additional people)) / total # people.

As an example, for a 2-person rate the adjustment factor would be 0.625 or (1 + (0.25 \* 1)) / 2, which is applied to the single person rate to calculate the 2-person rate.

<u>Supported Living Team-Base Staffing</u>: ID/DD and CSP supported living services are primarily delivered by a frontline worker but can also include direct services provided by frontline worker supervisors, LPNs, and RNs. Assumptions for the average staffing of this service per client visit are described below:

- One on one visits with a frontline worker
- 1:10 frontline worker to frontline supervisor staffing ratio
- On average one LPN per 50 clients
- One hour of RN supervision per 8 hours of LPN care

<u>Home-delivered meals</u>: The Planning and Development Districts (PDDs) partner with a third party to provide the E&D home delivered meals service. We used the SFY 2025 Department of Human Services statewide meal contract for meal cost and delivery charge in the rate rebase to develop the service rate. We included time for home delivered meal coordination in the administrative and program support assumption based on the per meal average staff wage and benefit cost as reported by providers via a targeted home delivered meal data collection request. We assumed

#### MILLIMAN REPORT

an administrative and program support cost of 5% in rate modeling, reflecting limited administrative burden for organizations responsible for home delivered meals.

#### Case management service assumptions:

For rate modeling purposes, we assumed case managers are typically salaried for a 40-hour work week with a possible 2,080 annual work hours (or an average of 173 hours per month). Case management services were modeled using the per month rate model approach and in rate development the case manager's average hourly wages are multiplied by the number of staff per case manager team and 173 worked hours per month.

Case manager case load assumptions vary by the service and program to reflect program specific requirements and how the service is being operated by providers. Below is the case manager to client caseloads included in payment rate modeling by program:

- ID/DD support coordination: 1 to 32
- CSP targeted case management: 1 to 35
- E&D case management: 1 to 42 (or 2 to 84 given this service operates using a team of 2 case managers)

E&D case managers are required to maintain a minimum 1:60 case load per case manager for individuals enrolled in Medicaid, but also perform assessment for individuals not yet enrolled in Medicaid to identify their eligibility for the program, which is time that is unable to be billed. The reduced caseload in rate modeling accounts for this additional time from case managers that is not billable.

<u>Caseload efficiency</u>: For all residential services, a case load efficiency of 95% is assumed to account for changes or churn in residents at a facility in a year or time where an individual may need their bed held in instances where they are residing outside of the facility.

# VI. Fiscal Impact

We developed fiscal impacts across the HCBS programs to represent a point in time estimation of the change in costs that would be incurred by DOM, DMH, and MDRS if the rebased payment rates were adopted. To calculate the fiscal impact, we subtracted the rebased payment rates from the current payment rates and multiplied that difference by the most recently available service units from DOM. The current payment rate level was assumed to be the minimum payment level based on our understanding that DOM does not plan to implement any rate decreases as part of this payment rate rebase project. Any services with a rebased payment rate at or below the current payment rate have no fiscal impact in the fiscal modeling. Fiscal impacts are an estimate based on historical units and do not reflect estimations of future changes to service utilization.

CSP current payment rates used in fiscal modeling were those effective as of November 1, 2023, while all other program's current payment rates reflect those effective July 1, 2023. Units were summarized from the SFY 2022 372 reports for all services except the CSP targeted case management service which had no available SFY 2022 372 report units at the time of summarization, and 2021 claims data units were used for this service instead. Figure 1 illustrates the rate rebase fiscal impacts in total and Appendix 2 summarizes fiscal impacts by program and service.

### VII. Limitations and Data Reliance

The information contained in this report has been prepared for the State of Mississippi, Division of Medicaid (DOM). The information contained in this report, including the appendices, has been prepared for DOM. To the extent that the information contained in this report is provided to third parties, the report should be distributed in its entirety. Any user of the data must possess a certain level of expertise in actuarial science and healthcare modeling so as not to misinterpret the data presented.

Milliman has developed certain models to estimate the values included in this report. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purposes and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

In preparing this report, we relied on information from the Mississippi Workforce Study (performed by the Mississippi State University), DOM service expenditure data, rate assumptions from DOM's 2018 ID/DD payment rate development, U.S. Bureau of Labor Statistics wage and benefit data, tax withhold information from federal and state agencies, and transportation and home delivered meal cost data submitted by DOM HCBS providers. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

The contents of this report are not intended to represent a legal or professional opinion or interpretation on any matters. Milliman makes no representations or warranties regarding the contents of this document to third parties. Similarly, third parties are instructed that they are to place no reliance upon this information prepared for DOM by Milliman that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Jill Bruckert and Katarina Lorenz are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this correspondence.

MILLIMAN REPORT

Appendix 1: Summary of Modeled Rates by Component

		Division	Mississippi of Medicaid Rate Rebase Study	omponent						
		Description Summary of Modeled Paym	ent Rates - by Rate C	отпропени	Mor	deled Payment R	atos		Comparison to	Current Pate
		Description			Employee	Transportation			Companison to	Current Nate
			Reporting	Salaries &	Related	& Fleet Vehicle	& Program	Total Modeled	Current	Percent
Procedure Code	Program	Service Category Detail	Units	Wages	Expenses	Expenses	Support	Rate	Payment Rate	Change
T1020 U4	Assisted Living	Assisted Living Services	Per Diem	\$ 53.04	\$ 9.72	\$ 4.08	\$ 15.94	\$ 82.78	\$ 66.11	25.2%
T1020 U4 U6	Assisted Living	TBI Residential	Per Diem	\$ 334.00	\$ 58.39	\$ 6.59	\$ 95.11	\$ 494.09	\$ 486.22	1.6%
H2023 U7	Community Support Program	Job Development	15 minute	\$ 7.79	\$ 1.47	\$ 0.65	\$ 1.10	\$ 11.01	\$ 10.15	8.5%
H2025 U7	Community Support Program	Job Maintenance - 1 Person	15 minute	\$ 7.60	\$ 1.44	\$ 0.73	\$ 1.08	\$ 10.85	\$ 9.63	12.7%
H2025 U7 UN	Community Support Program	Job Maintenance - 2 Person	15 minute	\$ 3.93	\$ 1.44	\$ 0.73	\$ 0.68	\$ 6.78	\$ 6.02	12.6%
H2025 U7 UP	Community Support Program	Job Maintenance - 3 Person	15 minute	\$ 2.71	\$ 1.44	\$ 0.73	\$ 0.54	\$ 5.42	\$ 4.81	12.7%
S5100 U7	Community Support Program	Day Services - Adult, Low Support	15 minute	\$ 2.35	\$ 0.43	\$ 0.61	\$ 1.13	\$ 4.52	\$ 4.51	0.2%
S5100 U7 TF	Community Support Program	Day Services - Adult, Medium Support	15 minute	\$ 2.82	\$ 0.52	\$ 0.61	\$ 1.31	\$ 5.26	\$ 4.98	5.6%
S5100 U7 TG	Community Support Program	Day Services - Adult, High Support	15 minute	\$ 3.75	\$ 0.69	\$ 0.61	\$ 1.68	\$ 6.73	\$ 5.52	21.9%
S5135 U7	Community Support Program	Supported Living - 1 person	15 minute	\$ 5.20	\$ 0.98	\$ 1.08	\$ 0.81	\$ 8.07	\$ 7.48	7.9%
S5135 U7 UN	Community Support Program	Supported Living - 2 Person	15 minute	\$ 3.25	\$ 0.61	\$ 0.68	\$ 0.50	\$ 5.04	\$ 4.72	6.8%
S5135 U7 UP	Community Support Program	Supported Living - 3 Person	15 minute	\$ 2.61	\$ 0.49	\$ 0.54	\$ 0.40	\$ 4.04	\$ 3.92	3.1%
T1019 U7 TF	Community Support Program	Respite - In Home - 1 Person	15 minute	\$ 5.02	\$ 0.94	\$ 0.44	\$ 0.71	\$ 7.11	\$ 6.19	14.9%
T1019 U7 UN TF	Community Support Program	Respite - In Home - 2 Person	15 minute	\$ 2.62	\$ 0.94	\$ 0.44	\$ 0.44	\$ 4.44	\$ 4.08	8.8%
T1019 U7 UP TF	Community Support Program	Respite - In Home - 3 Person	15 minute	\$ 1.82	\$ 0.94	\$ 0.44	\$ 0.36	\$ 3.56	\$ 3.41	4.4%
T2015 U7	Community Support Program	Prevocational - Low Support - Hourly	Hourly	\$ 9.38	\$ 1.74	\$ 2.45	\$ 4.52	\$ 18.09	\$ 14.90	21.4%
T2015 U7 TF	Community Support Program	Prevocational - Medium Support - Hourly	Hourly	\$ 11.23	\$ 2.09	\$ 2.45	\$ 5.26	\$ 21.03	\$ 15.82	32.9%
T2015 U7 TG	Community Support Program	Prevocational - High Support - Hourly	Hourly	\$ 14.96	\$ 2.78	\$ 2.45	\$ 6.73	\$ 26.92	\$ 17.38	54.9%
T2047 U7	Community Support Program	Prevocational - Low Support - 15 min	15 minute	\$ 2.35	\$ 0.43	\$ 0.61	\$ 1.13	\$ 4.52	\$ 3.73	21.2%
T2047 U7 TF	Community Support Program	Prevocational - Medium Support - 15 min	15 minute	\$ 2.82	\$ 0.52	\$ 0.61	\$ 1.31	\$ 5.26	\$ 3.96	32.8%
T2047 U7 TG	Community Support Program	Prevocational - High Support - 15min	15 minute	\$ 3.75	\$ 0.69	\$ 0.61	\$ 1.68	\$ 6.73	\$ 4.35	54.7%
T2023 U7 HW	Community Support Program	Targeted Case Management	Monthly	\$ 170.99	\$ 27.46	\$ 13.40	\$ 37.38	\$ 249.23	\$ 174.91	42.5%
T2022 U1	Elderly and Disabled	Case Management	Monthly	\$ 157.27	\$ 24.28	\$ 13.40	\$ 34.40	\$ 229.35	\$ 227.15	1.0%
S5170 U1	Elderly and Disabled	Home Delivered Meals	Per Meal	\$ 4.49	\$ 0.00	\$ 1.64	\$ 0.32	\$ 6.45	\$ 5.99	7.7%
T1016 SE UC	Elderly and Disabled	CTS Pre-Transition	15 minute	\$ 7.58	\$ 1.28	\$ 1.62	\$ 1.85	\$ 12.33	\$ 26.83	-54.0%
T1016 SE U1	Elderly and Disabled	CTS Post-Transition	15 minute	\$ 7.58	\$ 1.28	\$ 1.62	\$ 1.85	\$ 12.33	\$ 26.83	-54.0%
S5100 U1	Elderly and Disabled	Adult Daycare	15 minute	\$ 2.62	\$ 0.49	\$ 0.59	\$ 1.23	\$ 4.93	\$ 4.60	7.2%
	Elderly and Disabled	Adult Daycare - Low Support	15 minute	\$ 2.29	\$ 0.43	\$ 0.59	\$ 1.10	\$ 4.41	N/A	N/A
	Elderly and Disabled	Adult Daycare - High Support	15 minute	\$ 3.09	\$ 0.58	\$ 0.59	\$ 1.42	\$ 5.68	N/A	N/A
T1019 U1	Elderly and Disabled	Personal Care Services	15 minute	\$ 4.51	\$ 0.84	\$ 0.27	\$ 0.62	\$ 6.24	\$ 5.96	4.7%
S5150 U1	Elderly and Disabled	In Home Respite	15 minute	\$ 4.51	\$ 0.84	\$ 0.27	\$ 0.62	\$ 6.24	\$ 5.96	4.7%
S5151 U1	Elderly and Disabled	Institutional Respite	Per Diem	\$ 271.09	\$ 49.70	\$ 0.00	\$ 76.48	\$ 397.27	\$ 314.01	26.5%
PDN U1 LPN	Elderly and Disabled	Private Duty Nursing LPN	15 minute	\$ 10.77	\$ 1.78	\$ 0.54	\$ 1.46	\$ 14.55	N/A	N/A
PDN U1 RN	Elderly and Disabled	Private Duty Nursing RN	15 minute	\$ 13.13	\$ 1.95	\$ 0.54	\$ 1.73	\$ 17.35	N/A	N/A
	Elderly and Disabled	Private Duty Nursing RN with Ventilator	15 minute	\$ 16.95	\$ 1.95	\$ 0.54	\$ 2.16	\$ 21.60	N/A	N/A
TBD U1 MM IC	Elderly and Disabled	Medication Management - Initial/Annual Consultation	Per Visit	\$ 68.13	\$ 8.61	\$ 0.86	\$ 8.62	\$ 86.22	\$ 85.00	1.4%
	Elderly and Disabled	Medication Management - Follow-Up	Per Visit	\$ 35.36	\$ 4.47	\$ 0.86	\$ 4.52	\$ 45.21	\$ 45.00	0.5%
S5125 U2	Independent Living	Personal Care Attendant	15 minute	\$ 3.64	\$ 0.50	\$ 0.00	\$ 0.00	\$ 4.14	\$ 3.87	7.0%
S5125 U5	Traumatic Brain Injury/Spinal Cord Injury	Personal Care Attendant	15 minute	\$ 3.64	\$ 0.50	\$ 0.00	\$ 0.00	\$ 4.14	\$ 3.87	7.0%
S5150 U5	Traumatic Brain Injury/Spinal Cord Injury	In Home Companion Respite	15 minute	\$ 3.64	\$ 0.50	\$ 0.00	\$ 0.00	\$ 4.14	\$ 3.87	7.0%
T1005 U5 LPN	Traumatic Brain Injury/Spinal Cord Injury	In Home Nursing Respite LPN	15 minute	\$ 7.84	\$ 0.90	\$ 0.00	\$ 0.00	\$8.74	\$ 8.44	3.6%
T1005 U5 RN	Traumatic Brain Injury/Spinal Cord Injury	In Home Nursing Respite RN	15 minute	\$ 11.27	\$ 1.21	\$ 0.00	\$ 0.00	\$ 12.48	N/A	N/A
	Traumatic Brain Injury/Spinal Cord Injury	In Home Nursing Respite with Ventilator RN	15 minute	\$ 15.52	\$ 1.21	\$ 0.00	\$ 0.00	\$ 16.73	N/A	N/A
S5151 U5	Traumatic Brain Injury/Spinal Cord Injury	Institutional Respite	Per Diem	\$ 271.09	\$ 49.70	\$ 0.00	\$ 76.48	\$ 397.27	\$ 314.01	26.5%

Note: Totals may not tie due to rounding

	D	escription		Modeled Payment Rates Compariso			Comparison to	ison to Current Rate		
				Employee Transportation Administration						
			Reporting	Salaries &	Related	& Fleet Vehicle	& Program	Total Modeled	Current	Percent
Procedure Code		Service Category Detail	Units	Wages	Expenses	Expenses	Support	Rate	Payment Rate	Change
	Intellectual Disabilities/Developmental Disabilities	Support Coordination	Monthly	\$ 187.01	\$ 30.03		\$ 40.67	\$ 271.11	\$ 241.55	12.2%
	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, low support (Level 1 & 2)	Per Diem	\$ 147.60	\$ 27.46	\$ 12.17	\$ 44.64	\$ 231.87	\$ 217.76	6.5%
	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, medium support (Level 3)	Per Diem	\$ 163.97	\$ 30.52		\$ 49.27	\$ 255.93	\$ 239.07	7.1%
	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, high support (Level 4 & 5)	Per Diem	\$ 180.36	\$ 33.57	\$ 12.17	\$ 53.90	\$ 280.00	\$ 281.69	-0.6%
S5136 U3 UR	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 5 or more beds, low support (Level 1 & 2)	Per Diem	\$ 144.60	\$ 26.83		\$ 42.87	\$ 222.68	\$ 198.47	12.2%
		Supervised Living - 5 or more beds, medium support (Level 3)	Per Diem	\$ 153.96	\$ 28.58	\$ 8.38	\$ 45.51	\$ 236.43	\$ 210.67	12.2%
	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 5 or more beds, high support (Level 4 & 5)	Per Diem	\$ 163.32	\$ 30.32	\$ 8.38	\$ 48.16	\$ 250.18	\$ 235.01	6.5%
S5136 U3 TF	Intellectual Disabilities/Developmental Disabilities	Medical Supervised Living	Per Diem	\$ 318.62	\$ 54.93	\$ 8.38	\$ 91.05	\$ 472.98	\$ 353.10	34.0%
	Intellectual Disabilities/Developmental Disabilities	Behavioral Supervised Living	Per Diem	\$ 653.28	\$ 110.76		\$ 158.54	\$ 939.49	\$ 544.47	72.6%
	Intellectual Disabilities/Developmental Disabilities	Supported Living - Intermittent - 1 Person	15 minute	\$ 5.20	\$ 0.98	*	\$ 0.81	\$ 8.07	\$ 7.48	7.9%
	Intellectual Disabilities/Developmental Disabilities	Supported Living - Intermittent - 2 Person	15 minute	\$ 3.25	\$ 0.61	\$ 0.68	\$ 0.50	\$ 5.04	\$ 4.72	6.8%
	Intellectual Disabilities/Developmental Disabilities	Supported Living - Intermittent - 3 Person	15 minute	\$ 2.61	\$ 0.49		\$ 0.40	\$ 4.04	\$ 3.92	3.1%
	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - Low Support (Level 1 & 2)	Per Diem	\$ 78.55	\$ 14.53	\$ 30.35	\$ 29.42	\$ 152.85	\$ 137.81	10.9%
H0044 U3 TF	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - Medium Support (Level 3)	Per Diem	\$ 105.97	\$ 19.64		\$ 37.18	\$ 193.14	\$ 173.49	11.3%
	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - High Support (Level 4 & 5)	Per Diem	\$ 144.44	\$ 26.81	\$ 30.35	\$ 48.06	\$ 249.66	\$ 223.56	11.7%
	Intellectual Disabilities/Developmental Disabilities	Home and Community Supports – 1 Person	15 minute	\$ 5.02	\$ 0.94	\$ 0.44	\$ 0.71	\$ 7.11	\$ 7.20	-1.3%
		Home and Community Supports – 2 Person	15 minute	\$ 2.62	\$ 0.94	\$ 0.44	\$ 0.44	\$ 4.44	\$ 4.62	-3.9%
	Intellectual Disabilities/Developmental Disabilities	Home and Community Supports – 3 Person	15 minute	\$ 1.82	\$ 0.94	\$ 0.44	\$ 0.36	\$ 3.56	\$ 3.84	-7.3%
T1005 U3 LPN	Intellectual Disabilities/Developmental Disabilities	Respite – In Home Nursing LPN	15 minute	\$ 10.18	\$ 1.69		\$ 1.36	\$ 13.60	\$ 10.44	30.3%
T1005 U3 RN	Intellectual Disabilities/Developmental Disabilities	Respite – In Home Nursing RN	15 minute	\$ 12.42	\$ 1.84	\$ 0.37	\$ 1.62	\$ 16.25	N/A	N/A
	Intellectual Disabilities/Developmental Disabilities	Respite – In Home Nursing RN with Ventilator	15 minute	\$ 16.24	\$ 1.84		\$ 2.05		N/A	N/A
	Intellectual Disabilities/Developmental Disabilities	Respite – In Home – 1 Person	15 minute	\$ 5.02	\$ 0.94	\$ 0.44	\$ 0.71	\$ 7.11	\$ 6.19	14.9%
	Intellectual Disabilities/Developmental Disabilities	Respite – In Home – 2 Person	15 minute	\$ 2.62	\$ 0.94	\$ 0.44	\$ 0.44	\$ 4.44	\$ 4.08	8.8%
	Intellectual Disabilities/Developmental Disabilities	Respite – In Home – 3 Person	15 minute	\$ 1.82	\$ 0.94	\$ 0.44	\$ 0.36	\$ 3.56	\$ 3.41	4.4%
S5150 U3	Intellectual Disabilities/Developmental Disabilities	Community Respite	15 minute	\$ 2.35	\$ 0.43	\$ 0.61	\$ 1.13	\$ 4.52	\$ 3.11	45.3%
	Intellectual Disabilities/Developmental Disabilities	Day Services Adult - Low Support (Level 1 & 2)	15 minute	\$ 2.35	\$ 0.43	\$ 0.61	\$ 1.13	\$ 4.52	\$ 4.51	0.2%
	Intellectual Disabilities/Developmental Disabilities	Day Services Adult - Medium Support (Level 3)	15 minute	\$ 2.82	\$ 0.52		\$ 1.31	\$ 5.26	\$ 4.98	5.6%
S5100 U3 TG	Intellectual Disabilities/Developmental Disabilities	Day Services Adult - High Support (Level 4 & 5)	15 minute	\$ 3.75	\$ 0.69		\$ 1.68	\$ 6.73	\$ 5.52	21.9%
T2015 U3	Intellectual Disabilities/Developmental Disabilities	Pre-Vocational - Low Support (Level 1 & 2)	Hourly	\$ 9.38	\$ 1.74		\$ 4.52	\$ 18.09	\$ 14.90	21.4%
T2015 U3 TF	Intellectual Disabilities/Developmental Disabilities	Pre-Vocational - Medium Support (Level 3 & 4)	Hourly	\$ 11.23	\$ 2.09		\$ 5.26	\$ 21.03	\$ 15.82	32.9%
T2015 U3 TG	Intellectual Disabilities/Developmental Disabilities	Pre-Vocational - High Support (Level 4 & 5)	Hourly	\$ 14.96	\$ 2.78		\$ 6.73	\$ 26.92	\$ 17.38	54.9%
T2047 U3	Intellectual Disabilities/Developmental Disabilities	Prevocational - Low Support - 15 min	15 minute	\$ 2.35	\$ 0.43		\$ 1.13	\$ 4.52	N/A	N/A
	Intellectual Disabilities/Developmental Disabilities	Prevocational - Medium Support - 15 min	15 minute	\$ 2.82	\$ 0.52		\$ 1.31	\$ 5.26	N/A	N/A
	Intellectual Disabilities/Developmental Disabilities	Prevocational - High Support - 15min	15 minute	\$ 3.75	\$ 0.69		\$ 1.68	\$ 6.73	N/A	N/A
	Intellectual Disabilities/Developmental Disabilities	Job Discovery	15 minute	\$ 10.84	\$ 1.94	\$ 0.81	\$ 1.51	\$ 15.10	\$ 12.86	17.4%
	Intellectual Disabilities/Developmental Disabilities	Job Development	15 minute	\$ 7.79	\$ 1.47	\$ 0.65	\$ 1.10	\$ 11.01	\$ 10.15	8.5%
	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 1 Person	15 minute	\$ 7.60	\$ 1.44		\$ 1.08	\$ 10.85	\$ 9.63	12.7%
	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 2 Person	15 minute	\$ 3.93	\$ 1.44		\$ 0.68	\$ 6.78	\$ 6.02	12.6%
	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 3 Person	15 minute	\$ 2.71	\$ 1.44	+	\$ 0.54	\$ 5.42	\$ 4.81	12.7%
T2034 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Intervention - Daily	Per Diem	\$ 495.22	\$ 82.83	\$ 19.44	\$ 66.39	\$ 663.88	\$ 599.66	10.7%
H2011 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Intervention - Intermittent	15 minute	\$ 21.95	\$ 3.67	\$ 0.61	\$ 2.92	\$ 29.15	\$ 7.97	265.7%
H0045 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Support - ICF/IID	Per Diem	\$ 856.11	\$ 138.33	\$ 0.00	\$ 168.65	\$ 1,163.09	\$ 319.75	263.7%
H0002 U3	Intellectual Disabilities/Developmental Disabilities	Behavior Support Evaluation < 6 hours	Per Evaluation	\$ 398.72	\$ 55.57	\$ 19.44	\$ 52.64	\$ 526.37	\$ 370.10	42.2%
H0002 U3 TF	Intellectual Disabilities/Developmental Disabilities	Behavior Support Evaluation > 6 hours	Per Evaluation	\$ 758.65	\$ 105.72		\$ 98.20	\$ 982.01	\$ 740.18	32.7%
H2019 U3 HN	Intellectual Disabilities/Developmental Disabilities	Behavior Support Specialist	15 minute	\$ 12.70	\$ 2.04		\$ 1.88	\$ 18.84	\$ 15.17	24.2%
H2019 U3 HO	Intellectual Disabilities/Developmental Disabilities	Behavior Support Consultant	15 minute	\$ 19.93	\$ 2.78	\$ 2.31	\$ 2.78	\$ 27.80	\$ 21.62	28.6%

Note: Totals may not tie due to rounding



Appendix 2: Fiscal Impact Analysis of Modeled Rates by Service

#### State of Mississippi Division of Medicaid SFY 2026 HCBS Rate Rebase Study Fiscal Impact Analysis of Modeled Payment Rates - by Service Estimated Fiscal Impact **Payment Rates Estimated Payments** (Current to Modeled Rates) Modeled Modeled Service Units for Fiscal Service Category Detail **Current Rate Payment Rate Current Rates** Percent Change Procedure Code Program Type Impact Payment Rate Dollar Change T1020 U4 Assisted Living Assisted Living Services Residential 219,442 \$66.11 \$82.78 \$14,507,294 \$18,165,388 \$3,658,094 25.2% T1020 U4 U6 \$494.09 Assisted Living TBI Residential Residential 1.947 \$486.22 \$946.670 \$961.993 \$15.323 1.6% S5135 U7 Community Support Program Supported Living - 1 person In-Home 239.136 \$7.48 \$8.07 \$1,788,737 \$1,929,828 \$141 090 7.9% S5135 U7 UN 33,758 \$5.04 \$159,338 \$170,140 \$10,803 6.8% Community Support Program Supported Living - 2 Person In-Home \$4.72 S5135 U7 UP Community Support Program Supported Living - 3 Person In-Home 1,613 \$3.92 \$4.04 \$6,323 \$6,517 \$194 3.1% T1019 U7 TF Community Support Program Respite - In Home - 1 Person In-Home \$6.19 \$7.11 \$0 \$0 \$0 0.0% T1019 U7 UN TF Community Support Program Respite - In Home - 2 Person In-Home \$4.08 \$4.44 \$0 \$0 \$0 0.0% \$3.56 \$0 0.0% T1019 U7 UP TF Community Support Program Respite - In Home - 3 Person In-Home \$3.41 \$0 \$0 H2023 U7 13.071 \$132.671 \$143,912 \$11,241 8.5% Community Support Program Job Development Community \$10.15 \$11.01 H2025 U7 Community Support Program Job Maintenance - 1 Person Community 81,986 \$9.63 \$10.85 \$789,525 \$889,548 \$100,023 12.7% H2025 U7 UN Community Support Program Job Maintenance - 2 Person Community 7,168 \$6.02 \$6.78 \$43,151 \$48,599 \$5,448 12.6% H2025 U7 UP Community Support Program Job Maintenance - 3 Person Community 13,388 \$4.81 \$5.42 \$64.396 \$72,563 \$8,167 12.7% S5100 U7 Community Support Program Day Services - Adult, Low Support Community 992.232 \$4.51 \$4.52 \$4,474,966 \$4,484,889 \$9.922 0.2% S5100 U7 TF \$262,516 Day Services - Adult, Medium Support Community 937.558 \$4.98 \$5.26 \$4,669,039 \$4.931.555 5.6% Community Support Program \$1.089.742 S5100 U7 TG Community Support Program Day Services - Adult, High Support Community 197,417 \$5.52 \$6.73 \$1,328,616 \$238,875 21.9% T2015 U7 Community Support Program Prevocational - Low Support - Hourly Community 160,858 \$14.90 \$18.09 \$2,396,784 \$2,909,921 \$513,137 21.4% T2015 U7 TE Prevocational - Medium Support - Hourly 51 031 \$15.82 \$21.03 \$807.310 \$1.073.182 \$265.872 32.9% Community Support Program Community T2015 U7 TG Prevocational - High Support - Hourly 3,757 \$17.38 \$26.92 \$65,297 \$101,138 \$35,842 54.9% Community Support Program Community T2047 U7 Community Support Program Prevocational - Low Support - 15 min Community \$3.73 \$4.52 \$0 0.0% T2047 U7 TF Community Support Program Prevocational - Medium Support - 15 min Community \$3.96 \$5.26 \$0 \$0 \$0 0.0% T2047 U7 TG Prevocational - High Support - 15min Community 0.0% Community Support Program \$4.35 \$6.73 \$0 \$0 \$0 T2023 U7 HW Community Support Program Targeted Case Management All Other 10,377 \$174.91 \$249.23 \$1,815,041 \$2.586.260 \$771,219 42.5% T1019 U1 Elderly and Disabled Personal Care Services In-Home 42.475.260 \$253.152.550 \$265,045,622 \$11.893.073 4.7% \$5.96 \$6.24 S5150 U1 Elderly and Disabled In Home Respite In-Home 4,691,304 \$5.96 \$6.24 \$27,960,172 \$29,273,737 \$1,313,565 4.7% PDN U1 LPN Elderly and Disabled Private Duty Nursing LPN In-Home \$0.00 \$14.55 0.0% \$0 \$0 \$0 PDN U1 RN Elderly and Disabled Private Duty Nursing RN In-Home \$0.00 \$17.35 \$0 \$0 \$0 0.0% PDN U1 RN Vent Elderly and Disabled Private Duty Nursing RN with Ventilator In-Home \$0.00 \$21.60 \$0 \$0 \$0 0.0% S5100 U1 Elderly and Disabled Adult Daycare Community 8.191.800 \$4.60 \$4.93 \$37.682.280 \$40.385.574 \$2.703.294 7.2% S5100 U1 TBD1 Elderly and Disabled 0.0% Adult Daycare - Low Support Community \$0.00 \$4.41 \$0 \$0 \$0 S5100 U1 TBD2 Elderly and Disabled Adult Daycare - High Support Community \$0.00 \$5.68 \$0 \$0 \$0 0.0% S5151 U1 Elderly and Disabled Institutional Respite Residential 111 \$314.01 \$397.27 \$34,855 \$44.097 \$9.242 26.5% T2022 U1 Elderly and Disabled Case Management All Other 177.600 \$227.15 \$229.35 \$40.341.840 \$40.732.560 \$390.720 1.0%

#### State of Mississippi **Division of Medicaid** SFY 2026 HCBS Rate Rebase Study Fiscal Impact Analysis of Modeled Payment Rates - by Service Estimated Fiscal Impact **Payment Rates** Estimated Payments (Current to Modeled Rates) Units for Fiscal Modeled Modeled Service Service Category Detail **Current Rate** Payment Rate **Current Rates** Dollar Change Percent Change Procedure Code Program Payment Rate Type Impact Elderly and Disabled S5170 U1 Home Delivered Meals All Other 1,765,344 \$5.99 \$6.45 \$10.574.411 \$11,386,469 \$812.058 7.7% T1016 SE UC Elderly and Disabled CTS Pre-Transition All Other \$26.83 \$12.33 \$298 \$137 \$0 0.0% 11 T1016 SE U1 Elderly and Disabled CTS Post-Transition All Other \$26.83 \$12.33 \$0 \$0 \$0 0.0% TBD U1 MM IC Elderly and Disabled Medication Management - Initial/Annual Consultation All Other 5.550 \$85.00 \$86.22 \$471,750 \$478,521 \$6,771 1.4% TBD U1 MM FU Elderly and Disabled Medication Management - Follow-Up All Other 66,600 \$45.00 \$45.21 \$2,997,000 \$3,010,986 \$13,986 0.5% S5125 U2 25,142,130 \$97,300,043 7.0% Independent Living Personal Care Attendant In-Home \$3.87 \$4.14 \$104,088,418 \$6,788,375 S5125 U5 Traumatic Brain Injury/Spinal Cord Injury Personal Care Attendant In-Home 6.222.432 \$3.87 \$4.14 \$24,080,810 \$25,760,866 \$1,680,057 7.0% S5150 U5 In Home Companion Respite 30,912 \$3.87 \$4.14 \$119,629 \$127,976 \$8,346 7.0% Traumatic Brain Injury/Spinal Cord Injury In-Home T1005 U5 LPN Traumatic Brain Injury/Spinal Cord Injury In Home Nursing Respite LPN In-Home 8.637 \$8,44 \$8.74 \$72,892 \$75,483 \$2,591 3.6% T1005 U5 RN Traumatic Brain Injury/Spinal Cord Injury In Home Nursing Respite RN In-Home \$0.00 \$12.48 \$0 \$0 \$0 0.0% T1005 U5 RN Vent Traumatic Brain Injury/Spinal Cord Injury In Home Nursing Respite with Ventilator RN \$0.00 \$16.73 \$0 \$0 \$0 0.0% In-Home S5151 U5 \$54.167 \$14,362 26.5% Traumatic Brain Injury/Spinal Cord Injury Institutional Respite Residential 173 \$314.01 \$397.27 \$68,529 S5135 U3 Intellectual Disabilities/Developmental Disabilities Supported Living - Intermittent - 1 Person In-Home 579,198 \$7.48 \$8.07 \$4,332,402 \$4,674,128 \$341,727 7.9% S5135 U3 UN Intellectual Disabilities/Developmental Disabilities Supported Living - Intermittent - 2 Person In-Home 75.812 \$4.72 \$5.04 \$357,833 \$382,093 \$24,260 6.8% S5135 U3 UP \$3.92 \$4.04 \$16,117 \$493 3.1% Intellectual Disabilities/Developmental Disabilities Supported Living - Intermittent - 3 Person In-Home 4.111 \$16,610 S5125 U3 TF Intellectual Disabilities/Developmental Disabilities Home and Community Supports - 1 Person In-Home 4,159,143 \$7.20 \$7.11 \$29.945.828 \$29,571,505 \$0 0.0% 156.526 S5125 U3 UN TF Intellectual Disabilities/Developmental Disabilities Home and Community Supports - 2 Person In-Home \$4.62 \$4.44 \$723,151 \$694.976 \$0 0.0% S5125 U3 UP TF Intellectual Disabilities/Developmental Disabilities Home and Community Supports - 3 Person \$3.84 \$3.56 \$0 0.0% In-Home 71 \$271 \$251 T1005 U3 LPN Intellectual Disabilities/Developmental Disabilities Respite - In Home Nursing LPN In-Home 906,947 \$10.44 \$13.60 \$9,468,525 \$12,334,477 \$2,865,952 30.3% T1005 U3 RN Intellectual Disabilities/Developmental Disabilities Respite - In Home Nursing RN In-Home \$0.00 \$16.25 \$0 \$0 \$0 0.0% T1005 U3 RN Vent Intellectual Disabilities/Developmental Disabilities Respite – In Home Nursing RN with Ventilator In-Home \$0.00 \$20.50 0.0% \$0 \$0 \$0 T1019 U3 TF Intellectual Disabilities/Developmental Disabilities Respite - In Home - 1 Person In-Home 2,822,158 \$6.19 \$7.11 \$17,469,155 \$20,065,540 \$2,596,385 14.9% 79,519 T1019 U3 UN TF Intellectual Disabilities/Developmental Disabilities Respite - In Home - 2 Person In-Home \$4.08 \$4.44 \$324,438 \$353,064 \$28,627 8.8% T1019 U3 UP TF Intellectual Disabilities/Developmental Disabilities Respite - In Home - 3 Person \$3.56 \$22,026 4 4% In-Home 6.459 \$3,41 \$22,995 \$969 S5150 U3 Intellectual Disabilities/Developmental Disabilities Community Respite 21.406 \$4.52 \$66,574 \$96,757 \$30.183 45.3% Community \$3.11 S5100 U3 \$4.52 0.2% Intellectual Disabilities/Developmental Disabilities Day Services Adult - Low Support (Level 1 & 2) Community 3.099.278 \$4.51 \$13,977,745 \$14.008.738 \$30.993 S5100 U3 TF Intellectual Disabilities/Developmental Disabilities Day Services Adult - Medium Support (Level 3) Community 3,637,192 \$4.98 \$5.26 \$18,113,215 \$19,131,629 \$1,018,414 5.6% 21.9% S5100 U3 TG Intellectual Disabilities/Developmental Disabilities Day Services Adult - High Support (Level 4 & 5) Community 1.918.297 \$5.52 \$6.73 \$10.588.999 \$12.910.138 \$2,321,139 T2015 U3 Intellectual Disabilities/Developmental Disabilities Pre-Vocational - Low Support (Level 1 & 2) 165,495 \$14.90 \$18.09 \$2,465,869 \$2,993,797 \$527,928 21.4% Community T2015 U3 TF \$21.03 \$2,381,020 32.9% Intellectual Disabilities/Developmental Disabilities Pre-Vocational - Medium Support (Level 3 & 4) Community 150,507 \$15.82 \$3,165,162 \$784,141 T2015 U3 TG Intellectual Disabilities/Developmental Disabilities Pre-Vocational - High Support (Level 4 & 5) Community 10,794 \$17.38 \$26.92 \$187,602 \$290,579 \$102,976 54.9% T2047 U3 Intellectual Disabilities/Developmental Disabilities Prevocational - Low Support - 15 min Community \$0.00 \$4.52 \$0 \$0 \$0 0.0% T2047 U3 TF Intellectual Disabilities/Developmental Disabilities Prevocational - Medium Support - 15 min \$0.00 \$5.26 \$0 \$0 0.0% Community T2047 U3 TG Intellectual Disabilities/Developmental Disabilities Prevocational - High Support - 15min \$0.00 \$6.73 \$0 \$0 \$0 0.0% Community

24

				e Study	ce					
	Estimated Fiscal Impact Payment Rates Estimated Payments (Current to Modeled Rates)									
			Service	Units for Fiscal	Paymer	Modeled	Estimated	Modeled	(Current to Mo	odeled Rates)
Procedure Code	Program	Service Category Detail	Type	Impact	Current Rate	Payment Rate	Current Rates	Payment Rate	Dollar Change	Percent Change
97537 U3	Intellectual Disabilities/Developmental Disabilities	· · · · · · · · · · · · · · · · · · ·	Community	261	\$12.86	\$15.10	\$3,362	•	\$586	17.4%
H2023 U3	Intellectual Disabilities/Developmental Disabilities	Job Development	Community	57,317	\$10.15	\$11.01	\$581,764	\$631,056	\$49,292	8.5%
H2025 U3	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 1 Person	Community	328,661	\$9.63	\$10.85	\$3,165,003	\$3,565,969	\$400,966	12.7%
H2025 U3 UN	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 2 Person	Community	10,400	\$6.02	\$6.78	\$62,606	\$70,510	\$7,904	12.6%
H2025 U3 UP	Intellectual Disabilities/Developmental Disabilities	Supported Employment - Job Maintenance - 3 Person	Community	5,638	\$4.81	\$5.42	\$27,119	\$30,558	\$3,439	12.7%
H0043 U3	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - Low Support (Level 1 & 2)	Residential	41,470	\$137.81	\$152.85	\$5,714,943	\$6,338,648	\$623,705	10.9%
H0044 U3 TF	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - Medium Support (Level 3)	Residential	11,251	\$173.49	\$193.14	\$1,951,955	\$2,173,040	\$221,084	11.3%
H0045 U3 TG	Intellectual Disabilities/Developmental Disabilities	Shared Supported Living - High Support (Level 4 & 5)	Residential	322	\$223.56	\$249.66	\$71,902	\$80,297	\$8,394	11.7%
S5136 U3 UQ	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, low support (Level 1 & 2)	Residential	110,599	\$217.76	\$231.87	\$24,084,014	\$25,644,565	\$1,560,550	6.5%
S5136 U3 UQ TF	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, medium support (Level 3	Residential	127,104	\$239.07	\$255.93	\$30,386,668	\$32,529,636	\$2,142,967	7.1%
S5136 U3 UQ TG	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 4 beds or fewer, high support (Level 4 & 5)	Residential	63,430	\$281.69	\$280.00	\$17,867,545	\$17,760,349	\$0	0.0%
S5136 U3 UR	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 5 or more beds, low support (Level 1 & 2)	Residential	24,096	\$198.47	\$222.68	\$4,782,407	\$5,365,780	\$583,373	12.2%
S5136 U3 UR TF	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 5 or more beds, medium support (Level 3)	Residential	26,364	\$210.67	\$236.43	\$5,554,073	\$6,233,206	\$679,133	12.2%
S5136 U3 UR TG	Intellectual Disabilities/Developmental Disabilities	Supervised Living - 5 or more beds, high support (Level 4 & 5)	Residential	3,939	\$235.01	\$250.18	\$925,714	\$985,469	\$59,755	6.5%
S5136 U3 TF	Intellectual Disabilities/Developmental Disabilities	Medical Supervised Living	Residential	5,340	\$353.10	\$472.98	\$1,885,577	\$2,525,745	\$640,167	34.0%
S5136 U3 TG	Intellectual Disabilities/Developmental Disabilities	Behavioral Supervised Living	Residential	10,199	\$544.47	\$939.49	\$5,553,207	\$9,582,131	\$4,028,923	72.6%
H0045 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Support - ICF/IID	Residential	1,307	\$319.75	\$1,163.09	\$417,794	\$1,519,723	\$1,101,930	263.7%
T2022 U3	Intellectual Disabilities/Developmental Disabilities	Support Coordination	All Other	33,098	\$241.55	\$271.11	\$7,994,803	\$8,973,178	\$978,375	12.2%
T2034 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Intervention - Daily	All Other	139	\$599.66	\$663.88	\$83,368	\$92,296	\$8,928	10.7%
H2011 U3	Intellectual Disabilities/Developmental Disabilities	Crisis Intervention - Intermittent	All Other	6	\$7.97	\$29.15	\$50	\$181	\$132	265.7%
H0002 U3	Intellectual Disabilities/Developmental Disabilities	Behavior Support Evaluation < 6 hours	All Other	29	\$370.10	\$526.37	\$10,879	\$15,473	\$4,594	42.2%
H0002 U3 TF	Intellectual Disabilities/Developmental Disabilities	Behavior Support Evaluation > 6 hours	All Other	53	\$740.18	\$982.01	\$38,988	\$51,725	\$12,738	32.7%
H2019 U3 HN	Intellectual Disabilities/Developmental Disabilities	Behavior Support Specialist	All Other	86,085	\$15.17	\$18.84	\$1,305,910	\$1,621,842	\$315,932	24.2%
H2019 U3 HO	Intellectual Disabilities/Developmental Disabilities	Behavior Support Consultant	All Other	149,898	\$21.62	\$27.80	\$3,240,795		\$926,370	28.6%
Total - Across All	Programs (State and Federal Share)			110,632,519			\$754,750,198	\$810,957,952	\$56,717,628	7.5%
T-4-1 A 5	State Chara Only (Annual 27 10%) OF U. 00	OC CHAD)					\$470 004 0 to	#40F 222 702	#42.0F4.000	7.50
	grams - State Share Only (Assumes 77.16% SFY 202 licaid (DOM) - AL. CSP. E&D	ZO FMIAP)					\$172,384,945 \$92.952.276.94	\$185,222,796 \$98,248,944		
	Rehabilitation Services (MDRS) - TBI/SCI, IL						\$27,779,730.42	\$98,248,944		7.0%
	Mental Health (DMH) - ID/DD						\$51,652,938	\$57,254,154		11.1%

Note: Totals may not tie due to rounding

MILLIMAN REPORT	
	Appendix 3: Listing of Stakeholders Participating in Provider Workgroups

Organization Name
ARC
At Home Care
Better Living Home Care
Boswell Regional Center
Brandi's Hope
Care at Residence
Caring Hearts and Hands
Central MS Planning & Development District
Chateau ADC
Chateau Home Care
Christ Annointing Hands
Community Counseling Services
Community Development, Inc.
Compassionate Homemaker
Creekside Manor and Christopher's Manor
East Central Planning & Development District
First Choice Homemaker
Genuine Care
Golden Oaks
Golden Triangle Planning & Development District
Gulf Shores ADC
HamiltonDavis Mental Health
Help At Home
Help at Home
Hudspeth Regional Center
Indywood AL, Indywood Glen, and Indywood Estate
Lilly Pad Home Health
Loving Healthcare
Meridian Assisted Living
Millcreek
Mockingbird Assisted Living

Organization Name
MS ADC Provider Association
MS Department of Rehabilitation Services
MS HomeCare Provider Association
MS IDD Provider Association
Mt. Zion Economic Community Center
Natchez Senior Center
New Beginnings
New Progressions of MS
North Central Planning & Development District
North Delta Planning & Development District
Northeast MS Planning & Development District
Nursing Management, Inc.
Pine Belt Mental Healthcare Resources
Platinum Plus Care
Prime Care Nursing
Region 8 Mental Health Services
REM Mississippi
Right At Home North MS
Seashore Oaks
Silas Personal Care Home
Sincere Home Care
SON Valley
South Delta Planning & Development District
South Mississippi Regional Center
Southern MS Planning & Development District
Southwest MS Planning & Development District
Tate Enterprises
Three Rivers Planning & Development District
Willowood Developmental Center
WR Community Services

27

MILLIMAN REPORT	
	Appendix 4a: Detailed Rate Build-up Example: Per Unit – Non-Facility-Based

## Personal Care Attendant – Elderly and Disabled Waiver

Ref.	Description	Frontline Worker	Frontline Worker Supervisor	Total	Notes			
Α	Average minutes of direct time per unit	15.00		1	7 hours and 27 minutes of direct time per 8 hours			
В	Average minutes of indirect time per unit	0.48			14 indirect minutes per 8 hours			
С	Average minutes of transportation time per unit	0.63			19 transportation minutes per 8 hours    spread over 24 units per day			
D	Total minutes per unit	16.11			D = A + B + C			
E	Staffing ratio	1.00						
F	Supervisor span of control		20.00		20 employees assumed to be managed by 1 supervisor			
G	Supervisor time per unit		0.81		G = D / E / F			
Н	PTO/training time adjustment factor	8.7%	11.0%		Based on separate PTO build			
1	Adjusted total minutes per unit	17.51	0.89		I = D / E * (1 + H)    I = G * (1 + H)			
J	Hourly wage	\$ 14.02	\$ 16.68		Based on separate wage build			
K	Total wages expense per unit	\$ 4.09	\$ 0.25	\$ 4.34	K = J * 1 / 60			
L	Total OT minutes per unit	0.43	0.02		Based on serparate OT build			
M	Total wages expense per unit w/ OT	\$ 4.24	\$ 0.26	\$ 4.50	M = (J * 1.5 / 60) * L + K			
N	Employee related expense (ERE) percentage	18.6%	20.5%		Based on separate ERE build			
0	Total ERE expense per unit	\$ 0.79	\$ 0.05	\$ 0.84	O = M * N			
Р	Estimated miles driven per unit			0.40	Based on separate miles build spread over 24 units per day    average speed of 38.7 MPH			
Q	Federal reimbursement rate			\$ 0.67				
R	Transportation fleet costs per unit			\$ 0.27	R = P * Q			
S	Administration & program support			10.0%	Portion of total rate			
Т	Administration expenses			\$0.62	T = S * (M + O + R) / (1 - S)			
U	Service add-on expenses			\$ 0.00	No add-on expenses			
V	Total rate			\$ 6.24	V = M + O + R + T + U			
W	Rate adjusted for multiple people				Single Person Rate			
Х	15 minute Rate	- 3)		\$6.24	X = M + O + R + T			
Ref.	Alignment to Cost Allocation Plan	- 70		Total	Notes			
Y	Direct Service Employee Salaries & Wages			\$ 4.19				
Z	Indirect Service Employee Salaries & Wages			\$ 0.13				
AA	Transportation Service Employee Salaries & Wages			\$ 0.17				
AB	Employee Related Expenses			\$ 0.84				
AC	Transportation & Fleet Vehicle Expenses			\$ 0.27				
AD	Administration, Program Support & Overhead			\$ 0.62				
AE	Total Rate			\$6.24				

Note: Totals may not tie due to rounding



Appendix 4b: Detailed Rate Build-up Example: Per Unit – Facility-Based

# Adult Day Services - ID/DD and CSP, Medium Support

Ref.	Description	Frontline Worker	Frontline Worker Supervisor	Licensed Practical Nurse	Registered Nurse	Total	Notes
Α	Hourly wage	\$ 14.02	\$ 16.68	\$ 25.68	\$ 36.91		Based on separate wage build
В	Number of employees	7.44	1.00	0.67	0.08		Based on separate staffing assumption build
С	Average hours of operation						Based on assumptions
D	Total wages expense per day	\$ 939.55	\$ 150.13	\$ 154.07	\$ 27.68	\$ 1,271.43	D = A * B * C
E	Holidays worked	7	6	2	2		Based on serparate worked holiday and OT build
F	Percent of non-holiday hours paid at time and a half	10.0%	10.0%	10.0%	10.0%		Based on serparate worked holiday and OT build
G	Percent of total hours paid at time and a half	12.4%	12.1%		10.7%		G = (2080 - (E * 8)) * F + (E* 8)) / 2080
Н	Total direct care wage adjusted for overtime and holidays per day	\$ 997.91	\$ 159.19	\$ 162.30	\$ 29.16	\$ 1,348.57	H = D * (1 - G) + D * 1.5 * G
1	Employee related expense (ERE) percentage	18.6%	20.5%	16.9%	14.8%		Based on separate ERE build
J	Total ERE expense per day	\$ 185.94	\$ 32.59	\$ 27.36	\$ 4.32	\$ 250.21	
K	Single vehicle cost per day						Based on van build-up estimates
L	Vehicles per facility						Average number of vehicles per facility
M	Transportation fleet costs per day						M = K * L
N	Administration & program support						Portion of daily costs
0	Daily administrative expenses						O = N*(H+J+M)/(1-N)
P	Daily costs						P = H + J + M + O
Q	Number of clients per team						Based on assumptions
R	Average units per day per beneficiary						Based on assumptions
S	Total rate					1000000	S = P / Q / R
T	Rate adjusted for multiple people						Single Person Rate
U	15 minute Rate				1	\$5.26	U = T
- 100 00							
Ref.	Summary of Rate Model Components					Total	Notes
V	Direct Service Employee Salaries & Wages					\$ 2.81	
W	Indirect Service Employee Salaries & Wages					\$ 0.00	
X	Transportation Service Employee Salaries & Wages					\$ 0.00	
Y	Employee Related Expenses					\$ 0.52	
Z	Transportation & Fleet Vehicle Expenses					\$ 0.61	
AA	Administration, Program Support & Overhead					\$ 1.31	
AB	Total Rate					\$5.26	

Note: Totals may not tie due to rounding

MILLIMAN REPORT
Appendix 4c: Detailed Rate Build-up Example: Per Diem – Facility-Based Residential Services
Community Resed Service Rate Rehase Study

# **Assisted Living Services**

ift workers		Worker Supervisor	Activities Coordinator	Licensed Practical Nurse	Registered Nurse	Total	Notes
	3.90	1.00	1.00	-	1.00		
shift workers	3.40	2	4	2	0.0		
ift workers	1.70	-8-		-			
nd first shift workers	3.90	1.00	1.00	1.00	2		
nd second shift workers	3.40	-	*	+	**		
nd third shift workers	1.70	2	2	2	200		
eekly hours	504.00	56.00	56.00	16.00	40.00		$G = \{[(A + B + C) * 5] + [(D + E + F) * 2]\} * 8$
of individuals served						34	The assumed number of clients in the home
ining time adjustment factor	8.7%	11.0%	11.0%	11.0%	11.0%		Based on separate PTO build
d total hours of time per week	547.71	62.16	62.16	17.76	44.40		J = G * (1+1)
vage	\$ 14.02	\$ 16.68	\$ 17.73	\$ 25.68	\$ 36.91		Based on separate wage build
ages expense per week	\$ 7,680.66	\$ 1,036.80	\$ 1,102.08	\$ 456.01	\$ 1,638.78		L=J*K
s worked	7.0	6.0	2.0	2.0	2.0		Based on serparate worked holiday and OT build
of non-holiday hours paid at time and a half	10.0%	10.0%	10.0%	10.0%	10.0%		Based on serparate worked holiday and OT build
of total hours paid at time and a half	12.4%	12.1%	10.7%	10.7%	10.7%		O = (2080 - (M*8))*N + (M*8))/2080
irect care wage adjusted for overtime and holidays per week	\$ 8,157.74	\$ 1,099.40	\$ 1,161.00	\$ 480.39	\$ 1,726.39	\$ 12.624.92	P = L*(1-0)+L*0*1.5
ee related expense (ERE) percentage	18.6%	20.5%	19.9%	16.9%	14.8%		Based on separate ERE build
RE expense per week	\$ 1,520.03	\$ 225.04	\$ 230.56	\$ 80.99	\$ 255.89	\$ 2,312.51	
rehicle cost per week						\$ 243.02	Based on van build-up estimates
s per facility						4.00	Average number of vehicles per facility
ehicle costs per week						\$ 972.06	U = S * T
al before administration & program support						\$ 15,909.49	V = (P + R + U)
stration & program support						15.0%	Based on assumptions
stration & program support cost per week						\$2,807.56	X = (V * W) / (1 - W)
ost per week						\$18,717.05	Y = V + X
ad efficiency						95.0%	Based on assumptions
er week						7.00	
Rate						\$82.78	W=Y/Z/AA/H
Alignment to Cost Allocation Plan						Total	Notes
ervice employee salaries & wages						\$ 53.05	
Service Employee Salaries & Wages						\$ 0.00	
rtation Service Employee Salaries & Wages						\$ 0.00	
ee Related Expenses						\$ 9.72	
ntation & fleet vehicle expenses						\$ 4.08	
stration, Program Support & Overhead						\$ 15.94	
Sinta ee	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	ervice Employee Salaries & Wages ation Service Employee Salaries & Wages Related Expenses ation & fleet vehicle expenses	enrice Employee Salaries & Wages         \$ 0.00           ation Service Employee Salaries & Wages         \$ 0.00           Related Expenses         \$ 9.72           ation & fleet vehicle expenses         \$ 4.08

33

Note: Totals may not tie due to rounding

MILLIMAN REPORT

Appendix 4d: Detailed Rate Build-up Example: Per Month

# **Support Coordination – ID/DD**

Ref.	Description	Case Manager / Support Coordinator	Total	Notes
А	Hourly wage	\$ 29.18		Based on separate wage build
В	Number of employees	1.00		Based on service requirements
С	PTO/training time adjustment factor	12.3%		Based on separate PTO build
D	Total wages expense per month	\$ 5,680.85	\$ 5,680.85	D = A * B * 2,080 / 12
E	Holidays worked	2.00		Based on serparate worked holiday and OT build
F	Percent of non-holiday hours paid at time and a half	10.0%		Based on serparate worked holiday and OT build
G	Percent of total hours paid at time and a half	10.7%		G = (2080 - (E * 8)) * F + (E * 8)) / 2080
Н	Total direct care wage adjusted for overtime and holidays per month	\$ 5,984.56	\$ 5,984.56	H = D * (1 - G) + D * 1.5 * G
1	Employee related expense (ERE) percentage	16.1%		Based on separate ERE build
J	Total ERE expense per month	\$ 960.93	\$ 960.93	J = H * I
K	Estimated miles driven per month		640.00	Based on separate miles per unit build
L	Federal reimbursement rate		\$ 0.67	
M	Transportation fleet costs per month		\$ 428.80	M = K * L
N	Administration & program support		15.0%	Portion of monthly costs
0	Monthly administrative expenses		\$ 1,301.34	O = N*(H+J+M)/(1-N)
Р	Monthly costs		\$ 8,675.63	P = H + J + M + O
Q	Number of clients per team		32	
R	Average units per month per beneficiary		1	
S	Monthly Rate		\$271.11	S = P / Q / R

Ref.	Summary of Rate Model Components	Total	Notes
T	Direct Service Employee Salaries & Wages	\$ 153.94	
U	Indirect Service Employee Salaries & Wages	\$ 0.00	
V	Transportation Service Employee Salaries & Wages	\$ 33.08	
W	Employee Related Expenses	\$ 30.03	
Х	Transportation & Fleet Vehicle Expenses	\$ 13.40	
Y	Administration, Program Support & Overhead	\$ 40.67	
Z	Total Rate	\$271.11	

Appendix 4e: Detailed Rate Build-up Example: Per Meal

## Home Delivered Meals - E&D

Ref.	Description	Total	Notes
Α	Meal Cost	\$4.49	Trio Meal Cost Per Meal Effective 10/1/2024
В	Delivery Charge	\$1.64	Trio Meal Delivery Cost Per Meal Effective 10/1/2024
С	Subtotal before administration & program support	\$6.13	C = A + B
D	Administration & program support	5.0%	Portion of total rate
Е	Administration & program support expenses	\$0.32	E = D * C / (1 - D )
F	Per Meal Rate	\$6.45	F = C + E

Ref.	Alignment to Cost Allocation Plan	Total	Notes
G	Direct Service Employee Salaries & Wages	\$ 4.49	
Н	Indirect Service Employee Salaries & Wages	\$ 0.00	
I	Transportation Service Employee Salaries & Wages	\$ 0.00	
J	Employee Related Expenses	\$ 0.00	
K	Transportation & Fleet Vehicle Expenses	\$ 1.64	
L	Administration, Program Support & Overhead	\$ 0.32	
M	Total Rate	\$6.45	

Appendix 5: Staff Types by Service

In-home ar	nd Community Service Staff Types								
				Frontline		Licensed			Job
Service			Frontline	Worker	Activities	Practical	Registered		Discovery
Туре	Service	Program	Worker	Supervisor	Coordinator	Nurse	Nurse	Job Coach	Staff
In-Home	Personal Care	IL, TBI/SCI	X						
In-Home	Personal Care	E&D	X	X					
In-Home	Home and Community Supports	ID/DD	X	X					
In-Home	In Home Respite	TBVSCI	X						
In-Home	In Home Respite	E&D, CSP, ID/DD	X	X					
In-Home	In Home Nursing Respite	TBVSCI, ID/DD				X	X		
In-Home	Private Duty Nursing	E&D				X	X		
In-Home	Supported Living	CSP, ID/DD	X	X		X	X		
Community	Adult Day Care	E&D	X	X	X	X	X		
Community	Adult Day Services	CSP, ID/DD	X	X		X	X		
Community	Prevocational Services	CSP, ID/DD	X	X		X	X		
Community	Community Respite	ID/DD	X	X		X	X		
Community	Job Development	CSP, ID/DD	X	X				X	X
Community	Supported Employment/Job Maintenance	CSP, ID/DD	Х	Х				X	Х
Community	Job Discovery	ID/DD	X	X					X

Residentia	I Service Staff Types											
Service			Frontline	Frontline Worker	Activities	Licensed Practical	Registered	Therapist (OT/PT/	Behavioral Support	Behavior Support Consultant and		
Туре	Service	Program	Worker	Supervisor	Coordinator	Nurse	Nurse	Speech)	Specialist	Evaluation	Physician	Psychiatrist
Residential	Assisted Living Services	AL	X	X	X	X	X					
Residential	TBI Residential	AL	X	X		X	X	X				
Residential	Institutional Respite	E&D, TBVSCI	X	X		X	X					
Residential	Shared Supported Living	ID/DD	X	Х		X	X					
Residential	Supervised Living	ID/DD	X	Х		X	X					
Residential	Medical Supervised Living	ID/DD	X*	X*		X	X					
Residential	Behavioral Supervised Living	ID/DD	X*	X*		Х	X		Х	X		
Residential	Crisis Support	ID/DD	X*			X	X		X	X	X	X

All Other S	ervice Staff Types									
Service			Frontline	Behavioral Support	Behavior Support Consultant and	E&D Case	Case Manager / Support	Community	Registered	
Туре	Service	Program	Worker	Specialist	Evaluation	Manager	Coordinator	Navigator	Nurse	Pharmacist
All Other	Crisis Intervention	ID/DD	X	X	X					
All Other	Behavioral Support Specialist	ID/DD		X						
All Other	Behavioral Support Evaluation and Consultant	ID/DD			X					
All Other	Case Management	E&D				X				
All Other	Targeted Case Management / Support Coordination	CSP, ID/DD					X			
All Other	Community Transition Services	E&D						X	Х	
All Other	Medication Management	E&D								X
All Other	Home Delivered Meals	E&D								

Appendix 6: BLS Occupation Code Description

	BLS SOC	BLS 50th Percentile	
BLS Occupation	Code	(Mississippi)	Description
Home Health and Personal Care Aides	31-1120	\$10.97	Home health and personal care aides monitor the condition of people with disabilities or chronic illnesses and help them with daily living activities.
Nursing Assistants	31-1131	\$14.09	Provide or assist with basic care or support under the direction of onsite licensed nursing staff. Perform duties such as monitoring of health status, feeding, bathing, dressing, grooming, toileting, or ambulation of patients in a health or nursing facility. May include medication administration and other health-related tasks. Includes nursing care attendants, nursing aides, and nursing attendants. Excludes "Home Health Aides" (31-1121), "Personal Care Aides" (31-1122), "Orderlies" (31-1132), and "Psychiatric Aides" (31-1133).
Social and Human Service Assistants	21-1093	\$14.44	Assist other social and human service providers in providing client services in a wide variety of fields, such as psychology, rehabilitation, or social work, including support for families. May assist clients in identifying and obtaining available benefits and social and community services. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or dependent care. Excludes "Rehabilitation Counselors" (21-1015), "Psychiatric Technicians" (29-2053), "Personal Care Aides" (31-1122), and "Eligibility Interviewers, Government Programs" (43-4061).
Recreation Workers	39-9032	\$12.80	Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.
Rehabilitation Counselors	21-1015	\$20.01	Counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, aging, or the stress of daily life. Coordinate activities for residents of care and treatment facilities. Assess client needs and design and implement rehabilitation programs that may include personal and vocational counseling, training, and job placement. Excludes "Occupational Therapists" (29-1122).
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	21-1018	\$20.20	This occupation includes the 2018 SOC occupations 21-1011 Substance Abuse and Behavioral Disorder Counselors and 21-1014 Mental Health Counselors.
Healthcare Social Workers	21-1022	\$25.54	Provide individuals, families, and groups with the psychosocial support needed to cope with chronic, acute, or terminal illnesses. Services include advising family caregivers. Provide patients with information and counseling, and make referrals for other services. May also provide case and care management or interventions designed to promote health, prevent disease, and address barriers to access to healthcare.
Psychologists, All Other	19-3039	\$41.19	All psychologists not listed separately.
Licensed Practical and Licensed Vocational Nurses	29-2061	\$23.20	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.
Registered Nurses	29-1141	\$33.35	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes Clinical Nurse Specialists. Excludes "Nurse Anesthetists" (29-1151), "Nurse Midwives" (29-1161), and "Nurse Practitioners" (29-1171).
Pharmacists	29-1051	\$62.69	Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use.  May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.
Family Medicine Physicians	29-1215	\$77.62 at the 25th Percentile	Diagnose, treat, and provide preventive care to individuals and families across the lifespan. May refer patients to specialists when needed for further diagnosis or treatment. Excludes "General Internal Medicine Physicians" (29-1216) and "Pediatricians, General" (29-1221).
Psychiatrists	29-1223	\$96.20	Diagnose, treat, and help prevent mental disorders. Excludes "Clinical and Counseling Psychologists" (19-3033) and "School Psychologists" (19-3034).
Physical Therapists	29-1123	\$46.36	Physical therapists help injured or ill people improve movement and manage pain.
Occupational Therapists	29-1122	\$45.67	Occupational therapists evaluate and treat people who have injuries, illnesses, or disabilities to help them with vocational, daily living, and other skills that promote independence.
Speech-Language Pathologists	29-1127	\$35.55	Speech-language pathologists assess and treat people who have communication disorders.

41

Appendix 7: BLS Wages by Staff Type

		May 2023 BLS	Hourly Wages		Wage Trend	BLS Wages Trended to December 2025			
					Assumption	Midpoint 25th &			
Staff Types and Corresponding BLS SOCs	Blend %	25th Percentile	50th Percentile	75th Percentile	<u> </u>	25th Percentile	50th Percentile	50th Percentile	75th Percentile
Frontline Worker Includes Personal Care Attendant / Direct Support Professional (DSP) / Direct Care Worker / Resident Assistant / Driver	100%	\$10.90	\$12.67	\$15.07	4.0%	\$12.07	\$13.05	\$14.02	\$16.68
Home Health and Personal Care Aides Social and Human Service Assistants Nursing Assistants	50% 40% 10%	\$10.42 \$11.21 \$12.10	\$10.97 \$14.44 \$14.09	\$12.41 \$18.12 \$16.18	4.0% 4.0% 4.0%	\$11.53 \$12.41 \$13.39		\$12.14 \$15.98 \$15.59	\$13.74 \$20.06 \$17.91
Frontline Worker - ID/DD Enhanced (for medical and behavioral supervised living and crisis support services only)	100%	\$10.90	\$12.67	\$15.07	4.0%	\$12.07	\$13.05	\$14.02	\$16.68
Home Health and Personal Care Aides Social and Human Service Assistants Nursing Assistants	50% 40% 10%	\$10.42 \$11.21 \$12.10	\$10.97 \$14.44 \$14.09	\$12.41 \$18.12 \$16.18	4.0% 4.0% 4.0%	\$11.53 \$12.41 \$13.39		\$12.14 \$15.98 \$15.59	\$13.74 \$20.06 \$17.91
Frontline Worker Supervisor	100%	\$10.90	\$12.67	\$15.07	4.0%	\$12.07	\$13.05	\$14.02	\$16.68
Home Health and Personal Care Aides	50%	\$10.42	\$10.97	\$12.41	4.0%	\$11.53		\$12.14	\$13.74
Social and Human Service Assistants Nursing Assistants	40% 10%	\$11.21 \$12.10	\$14.44 \$14.09	\$18.12 \$16.18	4.0% 4.0%	\$12.41 \$13.39		\$15.98 \$15.59	\$20.06 \$17.91
Activities Coordinator	100%	\$11.41	\$12.80	\$16.02	4.0%	\$12.63	\$13.40	\$14.17	\$17.73
Recreation Workers	100%	\$11.41	\$12.80	\$16.02	4.0%	\$12.63		\$14.17	\$17.73
Job Coach	100%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91	\$19.53	\$22.15	\$27.27
Rehabilitation Counselors	100%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91		\$22.15	\$27.27
Job Discovery Staff	100%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91	\$19.53	\$22.15	\$27.27
Rehabilitation Counselors	100%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91		\$22.15	\$27.27
E&D Case Manager	100%	\$25.59	\$29.45	\$34.33	4.0%	\$28.32	\$30.45	\$32.59	\$37.99
Healthcare Social Workers	50%	\$21.37	\$25.54	\$30.00	4.0%	\$23.65		\$28.27	\$33.20
Registered Nurses	50%	\$29.80	\$33.35	\$38.65	4.0%	\$32.98		\$36.91	\$42.78
Community Navigator - Community Transition Service E&D	100%	\$18.33	\$22.78	\$27.32	4.0%	\$20.28	\$22.74	\$25.21	\$30.24
Healthcare Social Workers	50%	\$21.37	\$25.54	\$30.00	4.0%	\$23.65		\$28.27	\$33.20
Rehabilitation Counselors	50%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91		\$22.15	\$27.27

		May 2023 BLS	Hourly Wages			BL	.S Wages Trende	d to December 20	25
Staff Types and Corresponding BLS SOCs	Blend %	25th Percentile	50th Percentile	75th Percentile	Wage Trend Assumption	25th Percentile	Midpoint 25th &	50th Percentile	75th Percentile
Support Coordination (ID/DD)/Targeted Case Management (CSP)	100%	\$17.37	\$21.92	\$26.36	4.0%	\$19.23	\$21.74	\$24.26	\$29.18
Rehabilitation Counselors	33%	\$15.28	\$20.01	\$24.64	4.0%	\$16.91	¥=	\$22.15	\$27.27
Healthcare Social Workers Substance Abuse, Behavioral Disorder, and Mental Health Counselors	33% 33%	\$21.37 \$15.47	\$25.54 \$20.20	\$30.00 \$24.44	4.0% 4.0%	\$23.65 \$17.12		\$28.27 \$22.36	\$33.20 \$27.05
Behavior Support Specialist	100%	\$17.31	\$26.50	\$35.57	4.0%	\$19.16	\$24.24	\$29.33	\$39.37
Psychologists, All Other Substance Abuse, Behavioral Disorder, and Mental Health Counselors	30% 70%	\$21.60 \$15.47	\$41.19 \$20.20	\$61.55 \$24.44	4.0% 4.0%	\$23.91 \$17.12		\$45.59 \$22.36	\$68.12 \$27.05
Behavior Support Consultant and Evaluation	100%	\$21.60	\$41.19	\$61.55	4.0%	\$23.91	\$34.75	\$45.59	\$68.12
Psychologists, All Other	100%	\$21.60	\$41.19	\$61.55	4.0%	\$23.91		\$45.59	\$68.12
Licensed Practical Nurse	100%	\$20.24	\$23.20	\$26.48	4.0%	\$22.40	\$24.04	\$25.68	\$29.31
Licensed Practical and Licensed Vocational Nurses	100%	\$20.24	\$23.20	\$26.48	4.0%	\$22.40		\$25.68	\$29.31
Registered Nurse	100%	\$29.80	\$33.35	\$38.65	4.0%	\$32.98	\$34.95	\$36.91	\$42.78
Registered Nurses	100%	\$29.80	\$33.35	\$38.65	4.0%	\$32.98		\$36.91	\$42.78
Pharmacist - Medication Management (MM)	100%	\$58.62	\$62.69	\$68.10	4.0%	\$64.88	\$67.13	\$69.39	\$75.37
Pharmacists	100%	\$58.62	\$62.69	\$68.10	4.0%	\$64.88		\$69.39	\$75.37
Physician	100%	\$77.62	\$115.00	\$115.00	4.0%	\$85.91	\$106.60	\$127.28	\$127.28
Family Medicine Physicians	100%	\$77.62	\$115.00	\$115.00	4.0%	\$85.91		\$127.28	\$127.28
Psychiatrist	100%	\$27.41	\$96.20	\$115.00	4.0%	\$30.34	\$68.41	\$106.47	\$127.28
Psychiatrists	100%	\$27.41	\$96.20	\$115.00	4.0%	\$30.34		\$106.47	\$127.28
Therapist (OT/PT/Speech)	100%	\$34.72	\$42.53	\$48.24	4.0%	\$38.42	\$42.75	\$47.07	\$53.39
Physical Therapists	33%	\$37.82	\$46.36	\$50.22	4.0%	\$41.86		\$51.31	\$55.58
Occupational Therapists Speech-Language Pathologists	33% 33%	\$38.07 \$28.26	\$45.67 \$35.55	\$48.73 \$45.77	4.0% 4.0%	\$42.14 \$31.28		\$50.55 \$39.35	\$53.93 \$50.66

MILLIMAN REPORT

Appendix 8a: AL Program and Institutional Respite Service Staffing

Exhibit 1: Assisted Living Service			Number	34	
			Weekday	Weekend	
Staff Type	# Res Per	Weekly	FTEs	FTEs	Hrs Per Res
	DCW	Hours	(40 hrs)	(16 hrs)	Per Day
Direct Care Workers					
1st shift	10	190			
1st shift - additional driving hours		28	3.9	3.9	
2nd shift	10	190	3.4	3.4	
3rd shift - overnight hours	20	95	1.7	1.7	
Total		504	9.0	9.0	2.1
Other Staff		•	•	•	
Frontline Supervisor / Lead DCW		56	1.0	1.0	0.2
LPN		16	0.0	1.0	0.1
RN		40	1.0	0.0	0.2
Activities Coordinator		56	1.0	1.0	0.2
All Staff Totals		672	12.0	12.0	2.8

Exhibit 2: TBI Residential Service			Numbe	10		
			Weekday	Weekend		
Staff Type	# Res Per	Weekly	FTEs	FTEs	Hrs Per Res	
	DCW	Hours	(40 hrs)	(16 hrs)	Per Day	
Other Staff						
1st shift	2	280	5.0	5.0		
2nd shift	2	280	5.0	5.0		
3rd shift - overnight hours	2	280	5.0	5.0		
Total		840	15.0	15.0	12.0	
Other Staff						
Frontline Supervisor / Lead DCW		72	1.3	1.3	1.0	
LPN		112	2.0	2.0	1.6	
RN		14	0.3	0.3	0.2	
Therapist (OT/PT/Speech)		80	2.0	0	1.1	
All Staff Totals		1118	20.5	18.5	16.0	

46

Note: Totals may not tie due to rounding

#### **Key Assumptions:**

- Based on Mississippi Code for Assisted Living Requirements (Mississippi Code §43-11-13), Minimum Standards\*, and adjusted to reflect provider workgroup feedback related to challenges sufficiently staffing each shift.
- Institutional respite services staffing is consistent with the TBI residential service but excludes therapist staffing and reflects FTEs per resident
- · Each shift represents an 8-hour span of time.
- Daily FTEs assume staff to be working the full 8hour shift.
- · Direct care worker assumptions:
  - AL service assumption includes additional hours during 1<sup>st</sup> shift for resident transportation needs and reflects staffing ratios consistent with prior rate modeling.
  - TBI residential staffing ratio were based on workgroup member feedback that they would not exceed a 1:3 DCW to resident ratio and their actual ratio is closer to 1:2.
- · Nursing assumptions
  - The AL services requires at least a licensed nurse on the premises 8 hours/day. Rate modeling assumed 16 hours of LPN based on workgroup feedback that LPNs may be only nursing staff on weekends.
  - The TBI residential LPN hours are based on workgroup member feedback that one LPN is in the building for 16 hours/day (based on a census of 10 individuals). RN hours assume 1 RN hour for every 8 LPN hours.

Appendix 8b: ID/DD Shared Supported Living Staffing

ID/DD Shared Supported Living							
	Low			Medium Support		High Support	
Staff Type	Weekly Staffed Hours	# Res Per DCW	Weekly Hours per Res	# Res Per DCW	Weekly Hours per Res	# Res Per DCW	Weekly Hours per Res
Direct Care Workers							
1st shift	13	6	2.2	4.5	2.9	3	4.3
2nd shift	40	6	6.7	4.5	8.9	3	13.3
3rd shift (overnight)	40	10	4.0	10	4.0	10	4.0
Weekend 1st shift	16	6	2.7	4.5	3.6	3	5.3
Weekend 2nd shift	16	6	2.7	4.5	3.6	3	5.3
Weekend 3rd shift (overnight)	16	10	1.6	10	1.6	10	1.6
Additional DCW hours			7.0		14.0		21.0
Direct Care Worker Total			26.8		38.5		54.9
Other Staff							
Frontline Supervisor / Lead DCW	40	20	2.0	20	2.0	20	2.0
LPN	40	20	2.0	20	2.0	20	2.0
RN (1 RN to 8 LPN Hours)	5		0.3		0.3		0.3
Total Weekly Staffed Hours Per Resident			31.0		42.7		59.2

#### Key Assumptions:

- Based on DMH ICAP score staffing requirements, provider workgroup feedback, and prior rate development assumptions.
- DCW staffing is the only staffing that varies by support level, with daytime support levels in line with ICAP score staffing requirements.
  - o Overnight staffing reflects a 1:10 ratio based on workgroup feedback that not as many DCW are needed overnight.
  - 27 weekly hours were removed from the 1<sup>st</sup> shift reflecting time residents are anticipated to be out of the home without shared supportive living staff (e.g., attending day / employment services or working).
  - Additional DCW hours in 7-hour increments were included to account for variable need for additional 1:1 support and are in line with prior rate development assumptions.
- Supervision and LPN assumptions remained consistent with prior rate development, and RN staffing was newly included based on provider workgroup feedback.

Note: Totals may not tie due to rounding

Draft - October 22, 2024

MILLIMAN REPORT

Appendix 8c: ID/DD Supervised Living and Crisis Support Staffing

Total Weekly Staffed Hours	Supervised	Living - Four Be	ds or Fewer	Supervised	Living - Five B	eds or More	Medical Supervised	Behavioral Supervised Living	Crisis
	Low	Medium	High	Low	Medium	High	Living		Support
Direct Care Worker	164.0	185.0	206.0	275.0	295.0	315.0	488.0	336.0	336.0
Direct Care Worker Supervisor	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0
LPN	6.0	6.0	6.0	10.0	10.0	10.0	40.0	4.0	4.0
RN	0.8	0.8	0.8	1.3	1.3	1.3	5.0	0.5	0.5
Behavioral Support Specialist	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	112.0
Behavioral Support Specialist Supervisor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	11.2
Psychiatrist	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Physician	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
All Staff Total Weekly Hours Per Facility	180.8	201.8	222.8	296.3	316.3	336.3	543.0	412.1	469.7
Residents Per Facility	3	3	3	5	5	5	5	2	2
Direct Care Worker - Hours Per Resident	54.7	61.7	68.7	55.0	59.0	63.0	97.6	168.0	168.0
All Staff - Hours Per Resident	60.3	67.3	74.3	59.3	63.3	67.3	108.6	206.1	234.9

#### Key Assumptions:

- Staffing assumption are based on DMH ICAP score staffing requirements, provider workgroup feedback, and prior rate development assumptions.
- · Direct care worker assumptions:
  - Supervised living 4 bed or fewer and 5 bed or more services only reflect a weekly hour reduction for direct care worker time under the assumption that residents are out of the home without a need for direct care worker staff for 25 weekly hours per facility (e.g., attending day / employment services or working).
  - o Additional DCW hours in 7-hour increments were included to account for variable need for additional 1:1 support and are in line with prior rate development assumptions.
  - Direct care worker supervisors are assumed to oversee 4 direct care workers at a time, per workgroup feedback.
  - o Behavioral supervised living and crisis support staff direct care worker and supervisor wages were increased by around \$2 to reflect the more experienced staff needed to provide these service.

50

- Nursing assumptions:
  - LPNs were assumed to have a 1 LPN per 20 residents staffing, in line with prior rate modeling, with medical supervised living having a 1 LPN per 5 residents' assumption.
  - Per provider workgroup feedback, RN staffing has been included in rate development assumptions and an assumption of 1 hour RN to 8 LPN hours was selected.

Appendix 8d: E&D Adult Daycare Staffing

	Adult Daycar	e (current le	evel)	Low Support			High Support			
Staff Type	# Members Per DCW	Hours Per Day	Daily Staff	# Members Per DCW	Hours Per Day	Daily Statt	# Members Per DCW	Hours Per Day	Daily Staff	
DCW	5	45.0	5.0	6	36.0	4.0	4	58.5	6.5	
Frontline Supervisor / Lead DCW	3	9.0	1.0	6	9.0	1.0	] <del>"</del>	9.0	1.0	
DCW - Transportation										
hours to/from		12.0	1.3		12.0	1.3		12.0	1.3	
Activities Coordinator		9.0	1.0		9.0	1.0		9.0	1.0	
LPN		2.4	0.3		1.6	0.2		3.2	0.4	
RN		0.3	0.0		0.2	0.0		0.4	0.0	
Total Staffed Hours Per Day		77.7	8.6		67.8	7.5		92.1	10.2	

Number of clients in day center	30
Hours per day	9.0

#### **Key Assumptions:**

- · Based on Mississippi administrative code, provider workgroup feedback, E&D adult day survey responses, and prior rate development assumptions.
- Staffing assumptions vary for low and high support services with increased frontline worker and nurse time for high support. High support is defined as a program with a high percent of severely impaired people.
  - Per the Mississippi administrative code, 8 hours of nursing per week is required and is included with the LPN staff type for low support. This time is
    assumed to be double for high support compared to low support.
- Per provider workgroup feedback, RN staffing has been included in rate development assumptions and an assumption of 1 hour RN to 8 LPN hours was selected.

Appendix 8e: ID/DD and CSP Day Services Staffing

	Low Supp	ort		Medium S	upport		High Supp	ort			
Staff Type	#	# Hours Per		# Hours			#	# Hours Per			
	Members	Day	Daily Staff	Members	per Day	Daily Staff	Members	Day	Daily Staff		
DCW	4	36.0	4.0	2	51.0	5.7	2	81.0	9.0		
Frontline Supervisor / Lead DCW	- 4	9.0	1.0	]	9.0	1.0		9.0	1.0		
DCW - Transportation											
hours to/from		16.0	1.8		16.0	1.8		16.0	1.8		
LPN	30	6.0	0.7	30	6.0	0.7	30	6.0	0.7		
RN		0.8	0.1		0.8	0.1		0.8	0.1		
Total Staffed Hours Per Day		67.8	7.5		82.8	9.2		112.8	12.5		

Number of clients in day center	20
Hours per day	9.0

### Key Assumptions:

- Based on DMH operational standards, provider workgroup feedback, and prior rate development assumptions.
- Per DOM feedback assumed and LPN staffing ratio of 1 LPN to 30 members.
- Per provider workgroup feedback, RN staffing has been included in rate development assumptions and an assumption of 1 hour RN to 8 LPN hours was selected.

Appendix 9: Indirect Time Assumptions

Service			Indirect Time Hours Assumed	Indirect % of
Туре	Service	Program	(Per 8-Hour Day)	<b>Direct Care Time</b>
In-Home	Personal Care and Respite	IL, TBI/SCI	0.25	3%
In-Home	In Home Nursing	TBI/SCI	1.00	14%
In-Home	Personal Care and Respite	E&D	0.25	3%
In-Home	Private Duty Nursing	E&D	1.25	19%
In-Home	Personal Care, Respite, Nursing Respite	CSP, ID/DD	1.25	19%
In-Home	Supported Living	CSP, ID/DD	0.73	9%
Community	Job Discovery	ID/DD	3.00	60%
Community	Job Development	CSP, ID/DD	1.50	23%
Community	Supported Employment/Job Maintenance	CSP, ID/DD	1.25	19%
All Other	All Other - Crisis Intervention	ID/DD	3.00	60%
All Other	All Other - Behavioral Evaluation	ID/DD	2.25	39%
All Other	All Other - Behavioral Support	ID/DD	1.25	19%
All Other	All Other - Medication Management	E&D	3.25	68%

Note: Indirect time as a percent of direct care time is calculated as indirect time / (direct time – indirect time)

56

Appendix 10: Travel Time & Mileage Assumptions

Rate Modelin	ng Travel Time and Mileage Assumptions					
				Travel Time		
Service			Reporting	Per Unit	Miles Per	
Туре	Service	Program	Unit	(Minutes)	Unit	Travel Assumption Basis
Services with	only mileage assumptions	_				
In-Home	Home and Community Supports	ID/DD	15 minute	-	0.65	3 hours travel per client per 7-day week (or 26 min daily travel per client) were converted to a mileage assumption
In-Home	In Home Respite	CSP, ID/DD	15 minute	-	0.65	3 hours travel per client per 7-day week (or 26 min daily travel per client) were converted to a mileage assumption
In-Home	In Home Nursing Respite	ID/DD	15 minute	-	0.55	3.5 hours travel per client per 7-day week (or 30 min daily travel per client) were converted to a mileage assumption
In-Home	Supported Living	CSP, ID/DD	15 minute	-	1.62	125 mileage assumed per client per week
All Other	Case Management	E&D	Monthly	-	20.00	20 mileage assumed per client per month
All Other	Targeted Case Management / Support Coordination	CSP, ID/DD	Monthly	-	20.00	20 mileage assumed per client per month
All Other	Community Transition Services	E&D	15 minute	-	2.42	1 hour of travel per client per service were converted to a milage assumption
Services with	n only travel time assumptions					
In-Home	In Home Nursing Respite	TBI/SCI	15 minute	1.04	-	15 min travel per client per day
Services with	n travel time and mileage assumptions					
In-Home	Personal Care	E&D	15 minute	0.63	0.40	15 min travel per client per day with corresponding mileage assumption
In-Home	In Home Respite	E&D	15 minute	0.63	0.40	15 min travel per client per day with corresponding mileage assumption
In-Home	Private Duty Nursing	E&D	15 minute	1.25	0.81	30 min travel per client per day with corresponding mileage assumption
Community	Job Development	CSP, ID/DD	15 minute	1.50	0.97	4 hours travel per staff member per 5-day week (or 48 min daily travel per staff member) with corresponding mileage assumption
Community	Supported Employment/Job Maintenance	CSP, ID/DD	15 minute	1.69	1.09	4.5 hours travel per staff member per 5-day week (or 54 min daily travel per staff member) with corresponding mileage assumption
Community	Job Discovery	ID/DD	15 minute	1.88	1.21	5 hours travel per staff member per 5-day week (or 60 min daily travel per staff member) with corresponding mileage assumption
All Other	Crisis Intervention - Daily	ID/DD	Daily	45.00	29.01	45 min daily travel per client with corresponding mileage assumption
All Other	Crisis Intervention - Intermittent	ID/DD	15 minute	1.41	0.91	45 min daily travel per client with corresponding mileage assumption
All Other	Behavioral Support Evaluation	ID/DD	Per Evaluation	45.00	29.01	45 min daily travel per client with corresponding mileage assumption
All Other	Behavioral Support Specialist	ID/DD	15 minute	5.13	3.31	45 min daily travel per client with corresponding mileage assumption
All Other	Behavioral Support Consultant	ID/DD	15 minute	5.34	3.44	45 min daily travel per client with corresponding mileage assumption
All Other	Medication Management	E&D	15 minute	2.00	1.29	30 min of travel per trip per month, with 2 trips a month assumed to deliver prescriptions with corresponding mileage assumption

58

Appendix 11: PTO & Training Time Assumptions

59

		PTO and Trai	ning Time Adjus	tment Factor - I	Hours per Year					
	Α	В	C = A + B	D	E	F = D * E	G	H = C + F	I = G - H	J = G / I - 1
Staff Type	Annual PTO	Ongoing Training	Total PTO & Ongoing Training	Unadjusted New Hire Training	Turnover percentage	Adjusted New Hire Training	Total Hours per FTE	Total PTO and All Training (Ongoing & New Hire)	Remaining Productive Time	PTO & Training Adjustment Factor
ID/DD and CSP Staff		Ť								
Frontline Worker	120	30	150	120	32.0%	38.4	2,080	188.4	1,892	10.0%
Frontline Worker - ID/DD Enhanced	120	30	150	120	32.0%	38.4	2,080	188.4	1,892	10.0%
Frontline Worker Supervisor	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Activities Coordinator	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Job Coach	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Job Discovery Staff	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Support Coordination (ID/DD)/Targeted Case Management (CSP)	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Behavior Support Specialist	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Behavior Support Consultant and Evaluation	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Licensed Practical Nurse	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Registered Nurse	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Psychiatrist	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
Physician	160	30	190	120	32.0%	38.4	2,080	228.4	1,852	12.3%
E&D and AL Program Staff										
Frontline Worker	120	30	150	50	32.0%	16.0	2,080	166.0	1,914	8.7%
Frontline Worker Supervisor	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Activities Coordinator	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
E&D Case Manager	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Community Navigator - Community Transition Service E&D	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Licensed Practical Nurse	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Registered Nurse	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Pharmacist - Medication Management (MM)	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
Therapist (OT/PT/Speech)	160	30	190	50	32.0%	16.0	2,080	206.0	1,874	11.0%
TBI/SCI and IL Program Staff										
Frontline Worker	-	-	-	50	32.0%	16.0	2,080	16.0	2,064	0.8%
Frontline Worker Supervisor	-	-	-	50	32.0%	16.0	2,080	16.0	2,064	0.8%
Licensed Practical Nurse	-	-	-	50	32.0%	16.0	2,080	16.0	2,064	0.8%
Registered Nurse	-	-	-	50	32.0%	16.0	2,080	16.0	2,064	0.8%

Appendix 12: ERE Assumptions

			Employee Relate	ed Expenses						
	Α	В	С	D	E	F	G	Н	I	J
Provider Group	Trended Wage	Annual Employee Salary	FICA	FUTA	SUI	Workers Comp	Insurance	Retirement	ERE per Employee	ERE Percentage
			B * 7.65% up to							
			\$160,200							
Notes		A * 2080	taxable limit						SUM(C to H)	I/B
ID/DD, CSP, E&D, and AL Staff										
Frontline Worker	\$14.02	\$29,168	\$2,231	\$420	\$392	\$369	\$1,658	\$365		18.6%
Frontline Worker - ID/DD Enhanced	\$16.68	\$34,696	\$2,654	\$420	\$392	\$439	\$1,658	\$434	\$5,997	17.3%
Frontline Worker Supervisor	\$16.68	\$34,696	\$2,654	\$420	\$392	\$439	\$2,763	\$434	\$7,102	20.5%
Activities Coordinator	\$17.73	\$36,880	\$2,821	\$420	\$392	\$467	\$2,763	\$461	\$7,324	19.9%
Job Coach	\$19.53	\$40,621	\$3,108	\$420	\$392	\$514	\$2,763	\$508	\$7,704	19.0%
Job Discovery Staff	\$22.15	\$46,066	\$3,524	\$420	\$392	\$583	\$2,763	\$576		17.9%
Community Navigator - Community Transition Service E&D	\$25.21	\$52,431	\$4,011	\$420	\$392	\$664	\$2,763	\$655	\$8,905	17.0%
Licensed Practical Nurse	\$25.68	\$53,410	\$4,086	\$420	\$392	\$676	\$2,763	\$668	\$9,004	16.9%
Support Coordination (ID/DD)/Targeted Case Management (CSP)	\$29.18	\$60,685	\$4,642	\$420	\$392	\$768	\$2,763	<b>\$7</b> 59	\$9,744	16.1%
Behavior Support Specialist	\$29.33	\$61,000	\$4,667	\$420	\$392	\$772	\$2,763	<b>\$7</b> 63	\$9,776	16.0%
E&D Case Manager	\$32.59	\$67,787	\$5,186	\$420	\$392	\$858	\$2,763	\$847	\$10,466	15.4%
Registered Nurse	\$36.91	\$76,777	\$5,873	\$420	\$392	\$972	\$2,763	\$960	\$11,380	14.8%
Behavior Support Consultant and Evaluation	\$45.59	\$94,825	\$7,254	\$420	\$392	\$1,201	\$2,763	\$1,185	\$13,215	13.9%
Therapist (OT/PT/Speech)	\$47.07	\$97,903	\$7,490	\$420	\$392	\$1,240	\$2,763	\$1,224	\$13,528	13.8%
Pharmacist - Medication Management (MM)	\$69.39	\$144,322	\$11,041	\$420	\$392	\$1,827	\$2,763	\$1,804	\$18,247	12.6%
Psychiatrist	\$106.47	\$221,467	\$12,255	\$420	\$392	\$2,804	\$2,763	\$2,768	\$21,403	9.7%
Physician	\$127.28	\$264,747	\$12,255	\$420	\$392	\$3,352	\$2,763	\$3,309	\$22,492	8.5%
TBI/SCI and IL Staff					·					
Frontline Worker	\$14.02	\$29,168	\$2,231	\$420	\$392	\$369	<b>\$</b> 553	\$0	\$3,965	13.6%
Frontline Worker Supervisor	\$16.68	\$34,696	\$2,654	\$420	\$392	\$439	\$553	\$0	\$4,458	12.8%
Licensed Practical Nurse	\$25.68	\$53,410	\$4,086	\$420	\$392	\$676	\$553	\$0	\$6,127	11.5%
Registered Nurse	\$36.91	\$76,777	\$5,873	\$420	\$392	\$972	<b>\$</b> 553	\$0	\$8,210	10.7%

Appendix 13: Fleet Vehicle Assumptions

			Staff Ratio /				
Service			Average Daily	Annual Miles	Passengers Per	Vans Per	Proportion of
Туре	Service	Program	Clients	Per Person	Vehicle	Facility	Vans with Lift
Community	Adult Day Care	E&D	30	5,200	10	3.00	40%
Community	Adult Day Services	CSP, ID/DD	20	6,240	5	4.00	40%
Community	Prevocational Services	CSP, ID/DD	20	6,240	5	4.00	40%
Community	Community Respite	ID/DD	20	6,240	5	4.00	40%
Residential	Assisted Living Services	AL	34	1,000	10	4.00	40%
Residential	TBI Residential	AL	10	1,000	5	2.00	100%
Residential	Shared Supported Living	ID/DD	1	2,600	1	1.00	40%
Residential	Supervised Living - 4 beds or fewer	ID/DD	3	3,640	3	1.00	40%
Residential	Supervised Living - 5 beds or more	ID/DD	5	3,640	5	1.00	40%
Residential	Medical Supervised Living	ID/DD	5	3,640	5	1.00	40%
Residential	Behavioral Supervised Living	ID/DD	2	3,640	2	1.00	40%