

Summary Report and Benchmark Rates

1915(c) Home and Community Based Services Waiver
Rate Study – Version 2

Presented to:

Kentucky Department for Medicaid Services

Presented by:

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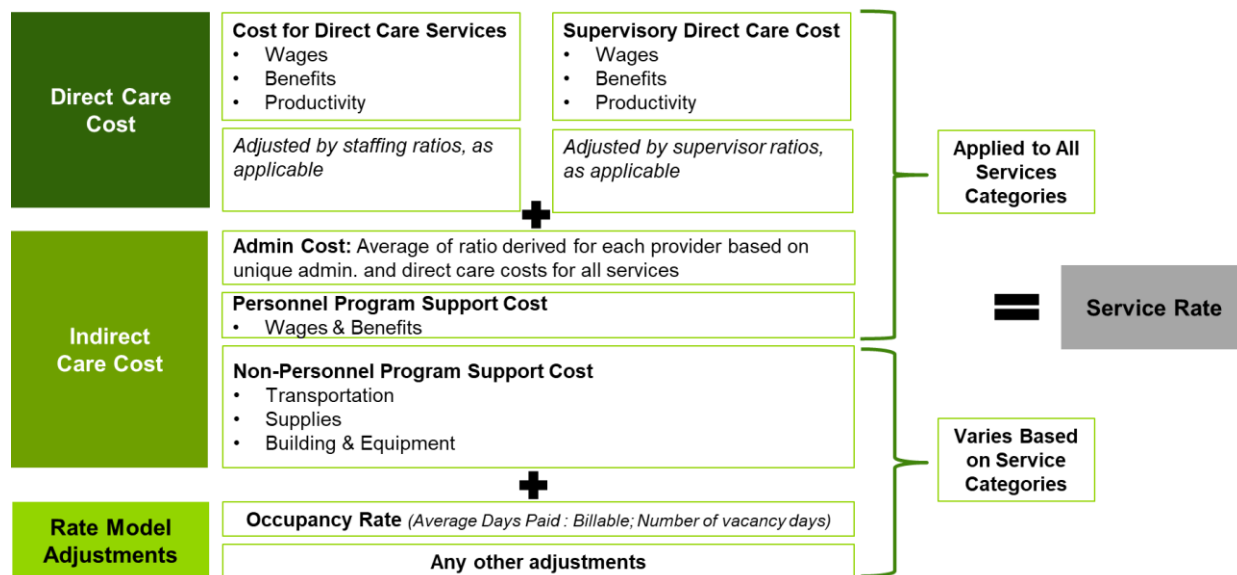
A. Executive Summary

In this report, Guidehouse Inc. (“Guidehouse”) presents our analysis and recommendations for new rates and rate methodologies applicable to each of the Kentucky Department for Medicaid Services’ (“DMS”, “Department”) six 1915(c) home- and community-based services (HCBS) waiver programs. These programs include the Acquired Brain Injury Waiver (ABI), Acquired Brain Injury Waiver – Long Term Care (ABI - LTC), Home and Community Based Waiver (HCB), Model II Waiver (MIIW), Michelle P. Waiver (MPW), and Supports for Community Living Waiver (SCL).

The report provides a detailed description of the rate methodology and benchmark rates for the majority of services included in each waiver program. This report does not include a review of services that are reimbursed at cost and as billed (e.g., Goods and Services) or select services as identified by the Department (e.g., Physical Therapy, Occupational Therapy, Speech Therapy) that will require a separate rate review in the near future.

To allow for a holistic rate determination process, Guidehouse conducted a comprehensive cost and wage survey to gather data from providers across programs as the basis for the rate studies. Guidehouse also leveraged findings from a recent cost and wage survey completed in 2019 to supplement findings, as needed. Lastly, Guidehouse reviewed the State’s claims and expenditure data, and other extensive state, regional, and national benchmark metrics, basing assumptions on industry data when provider-reported data was unavailable or insufficient for rate setting.

The approach used to establish the Department’s benchmark rates is an “independent rate build-up” methodology, as seen in **Figure 1** below, commonly applied by states for setting rates for similar populations. It is an approach recognized as compliant with specific Centers for Medicare & Medicaid (CMS) regulations and guidelines and congruent with rate setting principles more generally. In alignment with this independent rate build-up approach, the study identified appropriate cost assumptions for each value component used in the rate models, allowing rates to be built from the bottom up and calculated according to the relevant unit of service for each service included in the rate study. This modular approach requires a comprehensive analysis of the types of costs incurred by delivering a service and then represents these costs through a reasonable standard cost assumption, which serve as “building blocks” added together to form a cost-based rate for the service as a whole. One of the core objectives of the study was to determine benchmark rates based on resources required and to promote access to quality services going forward. As such, cost assumptions in the report frequently rely on recent costs reported by providers as well as national and regional standards that reflect wider labor markets and costs typical of broader industries to respond to changing wage expectations.

Figure 1. Independent Rate Model Build Up Approach


In summary, Guidehouse identified the following key takeaways for the Department as a result of the rate study:

1. Post-study benchmark rate **recommendations would result in sizable increases for 1915(c) waiver providers** as well as sizable funding increases, in most instances meeting or exceeding the increases implemented through the State Fiscal Year (SFY) 2023 / 2024 budget.
2. In some instances, post-study rate recommendations suggest that the **legislatively mandated increases implemented following the SFY2023 or 2024 budget may exceed what is necessary** to compensate providers.
3. The rate study data largely suggested a lack of evidence for rate adjustments per waiver. **Variance for similar services across different waiver populations is not required**, per DMS' evidence base.

B. Provider Rate Study

B.1. Introduction and Background

Kentucky's Department for Medicaid Services (DMS) Division of Long Term Services and Supports (DLTSS) contracted with Guidehouse to conduct a comprehensive rate study for each of the Commonwealth's six 1915(c) home and community-based services (HCBS) waivers. Prior to this rate study, DMS did not have an established, federally compliant rate methodology for HCBS waiver services, and the Centers for Medicare & Medicaid Services (CMS) has provided feedback to DMS regarding the need for a revised payment methodology going forward. DMS contracted with Guidehouse to develop a sound payment and rate-setting methodology, informed by a study of the reasonable and necessary costs incurred by providers to serve waiver participants in line with CMS guidance and federal requirements.

Guidehouse and DMS aligned on several key guiding principles for the rate study as outlined in **Figure 2** below.

Figure 2. Rate Study Guiding Principles

Provider-Inclusivity
• Work diligently with providers to obtain data and vet initial findings
Maximum Transparency
• Offer continued transparency to providers and stakeholders by delving into the details of the independent rate build-up
Objectivity
• Objectively consider current provider costs and financial realities based on regulatory requirements to deliver services
Rate Parity
• Aim for parity across waiver to promote equity in access to and quality of HCBS across disability populations
Focus on what is Federally Allowable
• Proceed in a manner that is sound and defensible to CMS, who must approve the methodology and resulting rates for implementation

In addition, Guidehouse established several objectives for the rate setting process, including:

1. Developing rates that:
 - a. Reflect individual participant needs
 - b. Consider reasonable and necessary costs of providers
 - c. Provide fiscal stability for providers, participants, and the Commonwealth
 - d. Create rate parity across waivers for like services
 - e. Balance efficiency and economy with appropriate access to quality care

2. Facilitating regular updates
3. Increasing transparency for providers and participants.

Guidehouse coordinated with DMS to identify the scope of HCBS waiver services that would be included in the rate study. In summary, Guidehouse included most services, but excluded those that are provided at cost (e.g., Goods and Services, Environmental Modifications) and other select services at the direction of DMS (e.g., Physical Therapy, Occupational Therapy, Speech Therapy). To update rates for these services, DMS would require additional rate benchmarking activities. **Figure 3** below identifies the services included in and excluded from the rate study.

Figure 3. Services Included in and Excluded from the Rate Study ¹

Current Rate Methodologies for Waiver Services Included in Rate Study:		Excluded Services
• Adult Day Health Care • Attendant Care • Behavioral Supports • Case Management / PDS Case Manager • Community Access – Individual/Group • Community Guide • Community Living Supports • Companion • Counseling – Individual/Group • Day Training • Dietary Services • Financial Management Services • Home Delivered Meals • Homemaking	• Non-Specialized Respite • Nursing Supports (ABI LTC) • Personal Assistance • Person Centered Coaching • Psychological Services • Shared Living • Skilled Services – RN/LPN/RT (Model II Waiver) • Specialized Respite • Supervised Residential (all levels) • Supported Employment • Technology Assisted Residential • Transportation Services	• Community Transition • Environmental Modifications • Family Training • Goods and Services • Natural Support Training • Occupational Therapy • Physical Therapy • Specialized Medical Equipment • Speech Therapy • Vehicle Adaptation

The rate study scope included the following study elements as described in the remaining sections of the report:

- **Provider Cost and Wage Surveys:** Gathering data from providers for rate review and rebasing efforts.
- **Stakeholder Engagement:** Facilitating engagement with stakeholders including provider representatives, legislative representatives, and State staff to solicit feedback throughout the rate development process.
- **Rate Modeling and Benchmark Rate Development:** Developing rate models through research and cost analysis on the current model and alternative models for in-home services and developing new proposed benchmark rates applicable to each HCBS waiver.

¹ The rate study also considered minor changes to existing services and/or phased out services. DMS did not request rate review of Assessment and Reassessment services in the study as DMS is working with CMS to review these services.

B.2. Stakeholder Engagement

B.2.1. Overview of Stakeholder Engagement

To support the development of cost-based rates for the State's programs, Guidehouse completed several methods of provider engagement throughout the rate development process. The key component of stakeholder engagement was the Provider Cost and Wage Survey, as it was the main forum for providers to report their cost experience. Provider outreach also included two virtual trainings that DMS recorded and posted to their website, as well as weekly updated frequency asked questions (FAQ) documents.

Additionally, we established a Rate Study Work Group to provide detailed review and feedback throughout the rate study process. The Rate Study Work Group met on a monthly basis throughout the course of the study, meeting 6 times in total. The Rate Study Work Group provided feedback on survey development, provider and participant communication, and individual rate components. We also conducted four (4) breakout sessions in November 2022 for the following service categories: case management, day services, residential services, and skilled services. These sessions served as a forum for targeted feedback on specific services.

Lastly, Guidehouse maintained an email inbox for providers, participants, and members of the public to ask questions. These questions included survey topics, rate study feedback, and other general rate questions. Utilizing this inbox allowed Guidehouse to correspond directly with the public with DMS oversight and helped create transparency and clarity around the rate study.

B.2.2. Rate Study Work Group Details

The Rate Study Work Group was comprised of a representative group of stakeholders, including providers, provider advocacy group representatives, legislators, and the Kentucky Cabinet for Health and Family representatives. Meeting topics included the purpose of the workgroup and rate study, an overview of the rate build up approach, and the strategy used for the cost and wage survey. Group members reviewed survey worksheets and finalized the survey communication approach. They also helped crosswalk job types across data sources and reviewed rate model components and analysis. As part of this review, workgroup members provided feedback on various rate components such as administration, program support, wages, and benefits factors.

To get more targeted feedback on rate components for certain service categories, we held four breakout sessions with providers that offer residential services, case management services, skilled services, and day services. Providers that attended these focus groups provided feedback and discussion on initial draft rates.

Guidehouse used feedback from the Rate Study Work Group and the associated focus groups directly in rate development.

B.2.3. Survey Communication Approach

Guidehouse developed a Provider Cost and Wage Survey for providers to report their cost experience. More detail about the content of the Provider Cost and Wage Survey can be found in Section B.3.2 in this report.

We recognized that the survey was dense and could be administratively burdensome for providers to fill out. To support the survey and alleviate some of that burden, Guidehouse relied on information from a prior Provider Cost and Wage Survey and designed a communication strategy to provide advanced notice and reminders throughout the survey process so that providers had adequate time to plan for and respond to the survey.

As part of the communications plan, DMS began with a pre-communication and survey announcement notifying providers of the survey release, which included training dates in Spring 2022 via email and on the State's website. In early April, DMS posted an official announcement of the survey release with training dates on the State's website and released via email. By mid-April 2022, DMS conducted a webinar on provider survey training and subsequently posted the recording and PowerPoint along with additional training materials, including a detailed instructions document, on the DMS website. After survey release, DMS sent weekly notifications that included reminders to complete the survey, references to the weekly-updated FAQ document, and contact information for the email inbox for the public to submit questions.

DMS and Guidehouse held two (2) provider survey training sessions, held an "office hours" session, posted four (4) versions of a weekly Frequently Asked Questions document, and responded to 31 questions submitted via the survey inbox.

Overall, the survey response rate of 64% was higher than anticipated. Historically, Guidehouse has observed a typical response rate of 20-30% for these types of provider surveys due to the potential length and complexity of responses.

The response rate received for the survey was deemed sufficient to submit rates for CMS approval.

Included below in **Figure 4** is the breakdown of survey submissions by waiver:

Figure 4. Survey Submissions by Waiver

Waiver	Total 1915(c) Waiver Providers	Number of Providers who Submitted Surveys	% of Provider Population
ABI	51	26	51%
ABI-LTC	60	29	48%
HCB	135	51	38%
MPW	261	137	52%

Waiver	Total 1915(c) Waiver Providers	Number of Providers who Submitted Surveys	% of Provider Population
MIIW	9	1	11%
SCL	257	131	51%
Total ²	479	305	64%

B.3. Data Sources

B.3.1. Overview of Data Sources

Guidehouse used an “independent rate build-up” approach to rate studies that factors in data from several sources to create well-rounded and data-informed rate recommendations. In this Kentucky 1915(c) Home and Community Based Services Rate Study, we leveraged data sources such as the 2019 and 2022 Provider Cost and Wage Surveys to establish how costs are incurred for providers. We also utilized national benchmarks to assess where Kentucky cost and wage data lies in relation to national trends. These data sources also allowed us to project changes to wages over time, tracking inflation and other time-dependent factors. Lastly, we used State benchmarks, such as data from the Bureau of Labor Statistics (BLS), to examine cost and wage data across the state and add additional context to the data collected through Provider Cost and Wage Surveys.

Guidehouse also utilized national benchmarks as data sources to examine inflation factors (Consumer Price Index and Current Employment Statistics), mileage rates (Internal Revenue Service [IRS]), and food costs (U.S. Department of Agriculture [USDA]). Additionally, Guidehouse used State benchmarks for health insurance data (Medical Expenditure Panel Surveys [MEPS]) and wages (Occupational Employment and Wage Statistics from BLS).

B.3.2. Provider Cost & Wage Survey

Based on Rate Study Work Group feedback, DMS decided to move forward with a mixed method approach to assessing provider costs and wages to account for existing costs and those that have been impacted by COVID-19 and the Public Health emergency. Guidehouse used cost data from a Provider Cost and Wage Survey that DMS distributed in early 2019. However, for wage data and other data elements that would have increased during and following the COVID-19 pandemic, Guidehouse relied on data collected from a new, abbreviated survey

² The total number of providers reflects unique IDs. Guidehouse included each provider only once in this total, even if they offer services under multiple waivers.

conducted in 2022. Specifically, data on administrative costs and program support costs like occupancy, transportation, equipment, supplies, and facilities was gathered from previous surveys. In the new survey, we collected data on wages, benefits, supervisor costs, productivity (billable vs. unbillable time), and other costs (like those related to COVID-19). DMS used this approach to help reduce administrative burden on providers and to reduce the time it took to complete the survey.

The 2022 Provider Cost and Wage Survey was made available for providers from April 7, 2022 through May 6, 2022. We asked respondents to provide information from the first quarter of the year, January through March 2022. The survey had a 64% response rate, yielding 188 submissions that represent 305 provider IDs. This was a 75% increase from Kentucky's previous rate study in 2019 where the State received 107 submissions.

Guidehouse reviewed the following information from Provider Cost and Wage Surveys:

- Staff to client ratios (2022 Survey)
- Supervisor time and ratios (2022 Survey)
- Billable time adjustments (2022 Survey)
- Benefits (2022 Survey)
- Program support (2019 Survey)
- Administrative overhead (2019 Survey)

B.3.3. Inflation and Wage Data

Hourly wages for direct care workers and supervisors serve as the baseline for the rate model build-up. Guidehouse presented wage data from both the Provider Cost and Wage Survey and BLS for DMS' consideration. DMS decided to use BLS data as the basis for wages in the rates. Both data sources needed to be adjusted for inflation. In the analysis, we used two inflation factors: one to bring wages from BLS to the time period of the survey, and another to bring the baseline survey data up to the rate implementation period.

There are many publicly available sources that aim to assess inflation. For the purposes of this study, DMS considered data from the Consumer Price Index, Producer Price Index, and Current Employment Statistics. DMS leveraged inflation rates from these data sources along with the most recently available BLS data from May 2021 to inflate wages to February 2022, the midpoint of the time period of the data reported in the cost and wage survey. We then compared these inflated wages with Provider Cost and Wage Survey data collected for January – March 2022. We inflated both the survey wage data and the inflated BLS wage data to 2023 for benchmark rate implementation recommendations based on an anticipated implementation date of July 1, 2023.

When comparing the inflation data sources, each yielded advantages and disadvantages. The

Consumer Price Index data source is the most widely used inflationary measure, but its data represents the US population broadly and is not specific to the rate study's target population or services. It also reflects the costs to the consumer of buying goods instead of the costs to the providers offering the services.

The Producer Price Index data source is most representative of the target population, as it includes Medicaid-specific data and services that are similar to HCBS. It also reflects the costs of providing services. However, the Producer Price Index functions as an index of costs as a whole. It is not specific to wage growth.

The Current Employment Statistics data source focuses on both employment and wages. It also includes services similar to HCBS. However, its data includes overtime and supplemental pay which may over-estimate base wage changes.

The Consumer Price Index, Producer Price Index, and Current Employment Statistics yielded average inflation values of 5.39%³, 3.35%⁴, and 7.76%⁵, respectively. Guidehouse averaged the values across selected categories over a period of May 2021 to February 2022. Due to its substantial advantages and minor disadvantages relative to the other considered data sources, DMS decided to use the inflation rate of 7.76% yielded from the Current Employment Statistics data source for the initial inflation adjustment from May 2021 wages to February 2022 wages.

Guidehouse leveraged data from the Consumer Price Index Medical Index from July 2021 to September 2022 as a basis to project inflation for the rates themselves from October 2022 – July 2023. Guidehouse used actuarial methods to find a trend factor from the analysis time period to the originally anticipated implementation period (July 2023). As such, DMS leveraged an inflation rate of 7.65% to inflate wage data from February 2022 to July 2023.

B.3.4. Other Data Sources

Guidehouse also used alternative data sources to develop rates for specific services. We used data sources from the USDA from March 2022 to estimate per person per month food costs. We used the mileage rate provided by the IRS for the first half of 2022 to build transportation costs into the rate model. Lastly, we leveraged the Medical Expenditure Panel Survey's Kentucky resources as a source for health insurance data. These additional data sources provided key elements to account for all the costs that a provider may incur to provide services for HCBS recipients. We discuss the impact of these other data sources further in section B.4.

³ Source: The Bureau for Labor Statistics (BLS), Consumer Price Index. <https://www.bls.gov/cpi/>

⁴ Source: The Bureau for Labor Statistics (BLS), Producer Price Index. <https://www.bls.gov/ppi/>

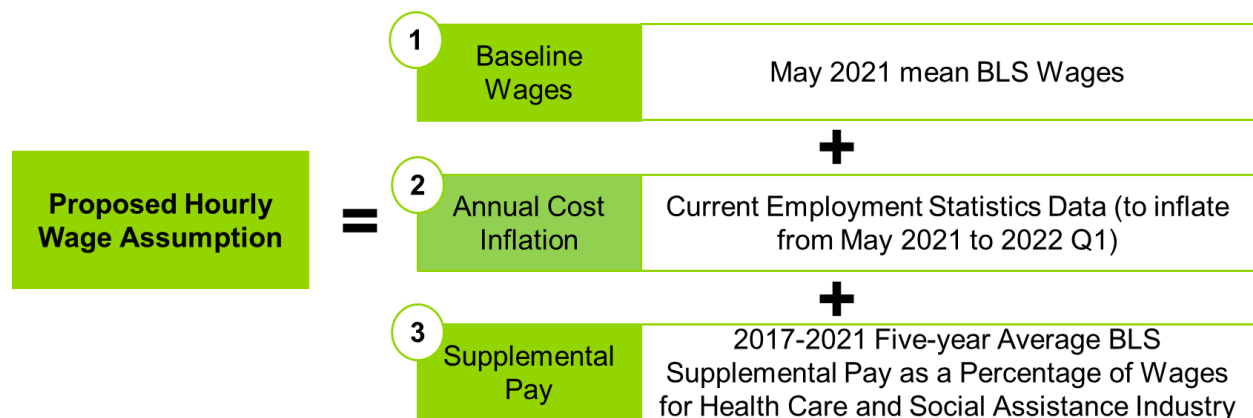
⁵ Source: The Bureau for Labor Statistics (BLS), Current Employment Statistics. <https://www.bls.gov/ces/>

B.4. Rate Components

B.4.1. Wage Methodology

We computed wages by inflating the baseline average hourly wages to reflect growth in costs as well as supplemental pay as a function of wage and labor costs as identified in **Figure 5** below.

Figure 5. Proposed Hourly Wage Assumption Formula



To calculate the hourly wage for each job type, we added the BLS mean wage, Current Employment Statistics (CES) Inflation Factor, and 3.64% for supplemental pay as identified above. **Table 1** below includes the proposed hourly wage by job type.

Table 1. Proposed Hourly Wages, Before Benefits, by Job Type

Job Type	Proposed Hourly Wage
Behavioral Support Specialist/Behavioral Analyst	\$51.70
Case Manager/Care Coordinator (billable)	\$24.84
Chef/Cook	\$14.89
Dietician	\$31.11
Direct Support Professional (DSP)	\$15.68
Driver	\$14.02
Employment Specialist	\$22.86
Financial Manager	\$22.82

Job Type	Proposed Hourly Wage
Licensed Practical Nurse (LPN)	\$25.32
Registered Nurse (RN)	\$36.12
Respiratory Therapist	\$29.64

The hourly wage for supervisors differs from the hourly wage for other staff. To calculate the proposed hourly wage for supervisors, we used the BLS 75th percentile wage, CES inflation factor, and 3.64% for supplemental pay. **Table 2** includes the proposed hourly supervisor wage by job type.

Table 2. Proposed Hourly Supervisor Wages, Before Benefits, by Job Type

Job Type	Proposed Hourly Wage for Supervisors
Behavioral Support Specialist/Behavioral Analyst	\$54.74
Case Manager/Care Coordinator (billable)	\$31.61
Chef/Cook	\$16.79
Dietician	\$34.10
Direct Support Professional (DSP)	\$19.33
Driver	\$16.07
Employment Specialist	\$25.68
Financial Manager	\$27.68
Licensed Practical Nurse (LPN)	\$26.42
Registered Nurse (RN)	\$41.36
Respiratory Therapist	\$32.85

B.4.2. Benefits Methodology

Our assumptions for employee-related expenses (ERE) look at what a provider should be able to offer as a competitive benefits package. ERE, or fringe benefits, are costs to the provider beyond wages and salaries, such as unemployment taxes, health insurance, and paid time off

(PTO). These fall into three distinct categories of benefits:

- Legally Required Benefits including federal and state unemployment taxes, federal insurance contributions to Social Security and Medicare, and workers' compensation.
- Paid Time Off including holidays, sick days, vacation days, and personal days.
- Other Components of ERE including health, dental, and vision insurance and retirement.

Not all providers who responded to the Provider Cost and Wage Survey have historically offered a “full” or competitive benefits package. However, our preliminary data includes information as to what benefits providers are currently offering. Our goal is to include a comprehensive but reasonable benefits package in benchmark rates to help employers to recruit and retain staff.

Calculating ERE requires analysis of the various benefits available to employees in the state based on cost survey, provider survey, and market data. Inputs include the average cost of benefits, adjusted using take-up rate and part-time adjustment factor as appropriate, as indicated in **Figures 6 and 7** below.

Figure 6: Example ERE Formula for Health, Dental, and Vision Insurance

$$\frac{\text{Average Cost of Insurance} \times \text{Insurance Take-Up Rate} \times \text{Part-Time Adjustment Factor}}{\text{Annual Wage}}$$

Figure 7: Example ERE Formula for Retirement ⁶

$$\frac{\text{Annual Wage} \times \text{Benefit Cost as a Percent of Wages} \times \text{Benefit Take-up Rate} \times \text{Part-Time Adjustment Factor}}{\text{Annual Wage}}$$

Legally Required Benefits and Retirement Benchmarking

Our team also accounted for all legally required benefits (**Table 3**) that should be included in

⁶ Legally required benefits are calculated similarly to the retirement formula, but the benefit take-up rate is excluded since these benefits must be offered to employees per state and federal statutes.

each rate buildup, including:

- **Unemployment Taxes⁷:** Employers in Kentucky pay a federal unemployment tax (FUTA) of 6.00% of the first \$7,000 in wages and state unemployment tax (SUTA) of a range of 0.5% to 2.9% for positive rated employers and 7% to 9.5% for negative rated employers of the first \$10,800 in 2022 wages. Generally, if you paid wages subject to state unemployment tax, you may receive a credit of up to 5.4% of FUTA taxable wages.
- **Federal Insurance Contributions⁸:** Employers pay a combined 7.65% rate of the first \$147,000 in wages for Social Security and Medicare contributions (Federal Insurance Contributions Act, or FICA).
- **Workers' Compensation⁹:** Employers in Kentucky pay an average effective tax of 2.40% toward workers' compensation insurance.

Table 3: Legally Required Benefits

Legally Required Benefits	
Federal Unemployment Tax (FUTA)	0.60% after credit
State Unemployment Tax (SUTA)	2.70% ¹⁰
Federal Insurance Contributions (FICA)	7.65%
Workers' Compensation	2.40%
Legally Required Benefits	11.11%¹¹

Our team also accounted for retirement plan contribution (**Table 4**), which is the **average** as reported in Provider Cost and Wage Survey for each service.

Table 4. Retirement Benefits

Retirement	
Retirement Take Up Rate	30.55%

⁷ Sources include the Internal Revenue Service (<https://www.irs.gov/taxtopics/tc759>), the Kentucky Career Center (https://kewes.ky.gov/Documents/EMPLOYER_GUIDE.pdf), and the Kentucky Office of Unemployment Insurance (<https://kewes.ky.gov/Contact/contacts.aspx?strid=2>)

⁸ Sourced from the Social Security Administration (<https://www.ssa.gov/thirdparty/materials/pdfs/educators/What-is-FICA-Infographic-EN-05-10297.pdf>).

⁹ Source was the Provider Cost and Wage Survey

¹⁰ New Employer rate based on Kentucky Career Center.

¹¹ This number is based on DSP wage of \$15.13. Legally required benefits may not apply to whole salary, so the total percentage is not equal to the sum of the component parts.

Retirement	
Retirement Plan Average Contribution	3.56%
ERE Dollar Amount ¹²	\$258
Percent of Annual Wage	0.82%

Paid Time Off Benchmarking

Additionally, we accounted for paid time off components of ERE, including holidays, sick days, vacation days, and personal days. In Provider Cost and Wage Survey responses, providers reported a wide range of paid time off values. The paid time off of 29 days included in **Table 5** below represents the average reported total days for all paid time off from the survey responses.

Table 5. Paid Time Off Benefits

Paid Time Off	
Part Time Adjustment Factor	75.24%
Paid Time Off	29 days/yr.
ERE \$ Amount ¹³	\$2,641
Percent of Annual Wage	8.39%

Health Insurance Benefits Benchmarking

We also considered health insurance benefits when developing benchmark rates. We compared the results of the 2022 Provider Cost and Wage Survey to data from the Medical Expenditure Panel Survey (MEPS), a national benchmarking tool. We have included our findings in **Table 6** below.

¹² Based on DSP wage of \$15.13.

¹³ Based on DSP wage of \$15.13.

Table 6. Health Insurance Benefits Data¹⁴

Metric	2022 KY Provider Survey Data	2020 MEPS Data (less than 50 employees)	2020 MEPS Data (50 + employees)	2020 MEPS Data Total
Employer Contribution to Health Insurance (Single Coverage)	\$6,255	\$5,339	\$5,422	\$5,414
Employer Contribution to Health Insurance (Family Coverage)	N/A	\$12,337	\$15,398	\$15,199
Weighted Employer Contribution to Health Insurance	\$6,255	\$7,108	\$8,937	\$8,771
Inflation ¹⁵		10%	10%	10%
Inflated Employer Contribution to Health Insurance	\$6,255	\$7,819	\$9,831	\$9,648
Percent of full-time employees	75.2%	74%	86%	84%
Health Insurance Take-Up Rate	43%	61%	62%	62%
Monthly	\$521	\$652	\$819	\$804
Adjusted Annual	\$2,033	\$3,533	\$5,197	\$4,978

When developing the health insurance benefit component for each rate, we determined that the health insurance take up rate and monthly premium is best aligned with the inflated 2020 MEPS data. We used the averages from the 2022 Provider Cost and Wage Survey to determine dental, vision, and other benefits.

In addition to health insurance, dental, and vision, we used the Provider Cost and Wage Survey to identify other benefits that providers are currently offering. These include benefits such as:

- Life insurance
- Disability insurance
- Cell phone and/or internet stipend
- Transportation stipend
- Tuition reimbursement
- Gym membership

For health, dental, and vision insurance as well as the other benefits, we included an aggregate

¹⁴ <https://www.meps.ahrq.gov/mepsweb/>

¹⁵ Inflation source was the BLS CPI Inflation Calculator, found at: <https://data.bls.gov/cgi-bin/cpicalc.pl>. Inputs were \$1 in July of 2020 (the midpoint of the MEPS data) to February of 2022 (the midpoint of the Provider Survey Data).

dollar value to cover any additional benefits that providers may want to offer as outlined in **Table 7**.

Table 7: Health Insurance Benefits Benchmarking

Category	Health Insurance Take Up Rate	Monthly Premium	Annual Cost ⁸	Percent of Annual Wage ¹⁶
Health	61.7%	\$804	\$4,479	14.23%
Dental	43.3%	\$15	\$58	0.19%
Vision	43.0%	\$5	\$20	0.06%
Other Benefits	69.2%	\$26	\$162	0.52%

ERE are calculated as a percentage of wages. The three components of ERE (Legally Required Benefits, Paid Time Off Benefits, and Other Benefits) are added together to determine total ERE. For this study, ERE was calculated for all job types, but only one is shown here (**Table 8**) for illustrative purposes.

Table 8: Employee Related Expenses (ERE) Calculations

Calculation Components	Calculation	Direct Support Professional (DSP)	Notes
Hourly Wage	A	\$15.13	
Annual Wages – FY2022	B = A * 2080	\$31,469	
Legally Required Benefits	C	\$3,496 (11.1%)	Shown as percentage and dollar portion of annual wage
Retirement Benefits	D	\$258 (0.8%)	
Paid Time Off Benefits	E	\$2,641 (8.4%)	
Insurance and Other Benefits	F	\$4,720 (15.0%)	
Total ERE per DSP	G = C + D + E + F	\$11,115 (35.3%)	
Hourly Wage with ERE	H = (1+G) * A	\$20.47	Using Total ERE Percentage
Annual Wage with ERE	I = H * 2080	\$42,578	Using Total ERE Percentage

¹⁶ Based on DSP wage of \$15.13.

B.4.3. Other Direct Care Rate Components

Beyond wages and benefits, there are several other components of providing care that impact the rate. Many of these are part of the direct care provided to participants. These other direct care rate components are described in the following subsections.

Supervisor Span of Control

In addition to the wages for the primary provider, we also included wages and benefits associated with supervisor time. Supervisors are an important part of delivering care. They typically have higher wages but spend less time delivering care. Supervisor Span of Control refers to the number of direct care workers overseen by one supervisor and the amount of time spent supervising. Adult Day Health Care and Residential Services do not include a supervisor and instead include a total care team, which incorporates supervisors and other people who contribute to a participant's care. Additionally, transportation services do not include a supervisor due to the nature of the per trip unit.

To calculate the annual adjusted wage per supervisor per individual, we multiply the supervisor compensation times the number of hours spent supervising divided by the number of staff per supervisor. Then we divide by 40 to get a weekly time. In **Table 9** below, we demonstrate the number of supervision hours per staff per week for each service type.

Table 9: Supervision Hours Per Staff Per Week by Service Type

Service Type ¹⁷	Number of Supervision Hours Per Staff Per Week
Home Based Services	0.53 hours
Respite Level II	0.75 hours
Day Training	2.86 hours
Behavioral Services (General)	1.0 hours
Counseling	0.50 hours
Functional Assessment	0.67 hours
Dietary	1.20 hours
Nursing Services	2.50 hours

¹⁷ Note: Services not listed do not receive a supervisor span of control due to the existence of a coordinated care team or due to the nature of the service.

Service Type ¹⁷	Number of Supervision Hours Per Staff Per Week
Case Management Services	1.33 hours
Financial Management Services	1.25 hours
Supported Employment Services	0.33 hours

Comprehensive Care Team

Some services require additional staff to provide care (along with the primary DSP) as part of the service definition. These services do not have a typical supervisor structure but a team of care staff instead. For these services, we built a comprehensive care team into the model to account for wages and benefits for these staff. To account for these additional service providers, we used the Staff to Client Ratios described in **Table 10** for Adult Day Health Care and the Annual Hours described in **Table 11** for residential services.

Table 10: Staff to Client Ratios Used for Comprehensive Care Team for Adult Day Health Care

Service	Staff to Client Ratio for Licensed Practical Nurses (LPNs) and Registered Nurses (RNs)
Adult Day Health Care	1:21

Table 11: Annual Hours Used for Comprehensive Care Team for Residential Services

Service ¹⁸	Annual Hours for Internal Service Coordinator/Case Manager and for RNs
Supervised Residential Care, Levels I and II	231
Technology Assisted Residential	116
All Other Residential Services	173

Residential Staffing Hours

We accounted for the staff to client ratios needed to staff the residential facility during the day and during the night to inform the time spent by all those participating in care in a given home (**Table 12**). We also accounted for the size of the home to understand how many staff would need to be included. We included substitute hours to accommodate time that staff is out for training or time off. Residential services often include a comprehensive care team as described

¹⁸ Shared Living does not receive an adjustment for a comprehensive care team due to the nature of the service.

above.

Table 12. Staff to Client Ratios by Service

Service	Hours of Client Sup. ¹⁹	House Size	Day Hours	Night Hours	Day Staff: Client Ratio	Night Staff: Client Ratio	Total Sub. Hours ²⁰	Total On Call Hours
Residential Support, Level I, 4-8 residents	24	8	14	10	1:3	1:8	274	-
Residential Support, Level I, 3 or less residents	24	3	14	10	1:3	1:3	371	-
Residential Support, Level II, 12+ hours supervision	18	3	12	6	1:3	1:3	278	104
Residential Support, Level II, less than 12 hours supervision	8	3	8	-	1:3	1:3	124	278
Supervised Residential Care, Level I	24	3	12	12	1:3	1:3	371	-
Supervised Residential Care, Level II	15	3	15	-	1:3	1:3	232	156
Supervised Residential Care, Level III	8	4	8	-	1:4	1:4	93	209
Shared Living	1	1	1	-	1:1	1:1	-	-
Technology Assisted Residential	-	3	-	-	1:9	1:9	-	973

To determine the number of staff needed during the day, we took the house size divided by the daytime staff to client ratio. To determine the number of staff needed during the night, we took the house size divided by the nighttime staff to client ratio. To get to the total annual DSP hours during the day per participant, we multiplied the number of staff during the day by the number of daytime hours by 365 and divide by the house size. To get to the total annual DSP hours during the night per participant, we multiplied the number of staff during the night by the number of nighttime hours by 365 and divide by the house size. We then added daytime and nighttime DSP hours together to get total annual DSP hours. We then include substitute hours and on-call hours for relevant services.

Billable Time Adjustments

Billable Time Ratio adjustment accounts for time spent on important non-billable responsibilities including record keeping time, travel time between clients, time spent on program development and other job duties (e.g., time spent on staff meetings). Residential Services, Case Management Services, and Financial Management Services do not receive a billable time ratio adjustment because these are monthly and daily rates that already account for non-billable time.

¹⁹ "Sup" refers to Supervision

²⁰ "Sub" refers to Substitution

Meals and Transportation do not receive the adjustment due to the nature of the service and associated units. We describe the billable time adjustments for each service category in **Table 13**.

Table 13. Billable Time Adjusted Wage Calculations for Skilled Services

Calculation		Home Based Services (General)	Respite	Day Services	Behavioral Services	Nursing Services	Supported Employment Services
A	Average billable time ratio	86%	90%	85%	75%	75%	69%
B	Number of Billable Hours in a Standard 8-hour Day = A * 8 standard hours	6.91 hrs	7.20 hrs	6.80 hrs	6.00 hrs	6.00 hrs	5.55 hrs
C	Billable Time Adjustment = 8 standard hours ÷ B	1.16	1.11	1.18	1.33	1.33	1.44

B.4.4. Indirect Care Rate Components

In addition to wages, benefits, and the other direct care components described above, we understand that there are various indirect costs that impact service delivery. We describe how we account for these indirect care components in the rates in the following subsections. In **Table 14** below, we lay out which indirect care rate components apply to which service. This methodology was developed using feedback from the Rate Study Work Group, who suggested which components should apply to which services. Per CMS requirements, Room and Board (R&B) must not be covered under these rates and therefore are excluded from the following calculations.

Table 14. Indirect Care Cost Components by Service Category

Service Category	Baseline Program Support	Occupancy Adjustment	Supplies (including non-R&B food)	Facility Costs (non-R&B)	Transportation	Administrative Overhead
Home-Based Services	X				X	X
Day Services	X	X	X	X	X	X
Behavioral Services	X				X	X
Nursing	X				X	X
Residential Services	X	X	X		X	X
Case Management	X				X	X

Service Category	Baseline Program Support	Occupancy Adjustment	Supplies (including non-R&B food)	Facility Costs (non-R&B)	Transportation	Administrative Overhead
Financial Management	X					X
Supported Employment	X				X	X
Home-Delivered Meals	X		X	X	X	X
Transportation					X	X

Administrative Costs

For rate setting purposes, we represent administrative costs with an “administrative cost factor,” which is a multiplication factor applied to the direct care cost of the service. We include administrative costs within the rate model as a percentage of direct care employee’s total compensation. Guidehouse based the administrative factor on data from the 2019 survey. Of all administrative costs, the factors included in this model account for almost all the administrative expenses reported by providers in the 2019 cost survey. Some administrative costs, such as advertising expenses and bad debt, are unallowable for Medicaid reimbursement.

Administrative costs that are included in the rate calculation include the following:

- Wage, payroll taxes and benefit costs for staff reported as administrative
- Office equipment and furniture
- Non-capital interest expenses
- Non-payroll taxes
- Licensing, certification and accreditation fees
- Hiring expenses
- Staff training and development related to administrative processes
- Insurance (not auto or staff benefit)
- IT and office supplies
- Postage
- Dues and subscriptions
- Corporate office overhead

As demonstrated in **Figure 8**, to calculate the administrative cost factor, we calculate provider-specific administrative factors by dividing each provider’s total administrative expenses by their total waiver costs. We use the median factor across all providers.

Figure 8. Formula For Administrative Factor Calculation ²¹

$$\frac{\text{admin employee salary and wages} + \text{admin contractor salary and wages} + \text{admin tax and benefits} + \text{total non-payroll admin expenses}}{\text{total costs} - (\text{cost of bad debt} + \text{advertising and marketing expenses})}$$

Based on 2019 survey results, Guidehouse used a single administrative cost factor of 19.02% for covering overhead costs across the system. To determine this number, Guidehouse used median values to mitigate influences from extremes and excluded providers with administrative costs above 50% of direct care compensation.

Provider administrative costs have typically ranged between 15-25% of direct care compensation in similar Guidehouse home- and community-based services rate setting engagements. The percentages and variation reported by Kentucky's waiver providers are typical and fall within the expected range of reported costs.

Program Support Costs

"Program support" generally refers to costs that support direct care services and are not related to room and board, for example:

- Facility and equipment costs
- Transportation not separately billable (vehicle, mileage, maintenance)
- Supplies, including food

We typically include program support cost factors in the rate model as a percentage of direct care employee's total compensation. In this case, we used a multiplication factor for each service that gets multiplied by the Direct Care Component. We used one factor across all services.

As demonstrated in **Figure 9**, to calculate the program support cost factor, we calculate provider-specific program support factors by dividing each provider's total program support expenses by their total waiver costs. We use the median factor across all providers.

²¹ Non-payroll admin expenses include office furniture not for direct care, interest expense, non-payroll taxes, licensing/certification fees, hiring expenses, staff training and development, insurance, IT expenses, office supplies, postage, legal/accounting, travel, corporate overhead, and other costs.

Figure 9. Formula For Program Support Factor Calculation ²²

$$\frac{\text{program support employee salary and wages} + \text{program support contractor salary and wages} + \text{program support tax and benefits} + \text{total non-payroll program support expenses}}{\text{total costs} - (\text{cost of bad debt} + \text{advertising and marketing expenses})}$$

Program Support Factor Results

Based on 2019 survey data, Guidehouse used a baseline program support cost factor of 9.24% to cover general program support costs across the system. To determine this number, Guidehouse used median values to mitigate influences from extremes and excluded providers with program support costs above 40% of direct care compensation.

Provider program support costs typically range between 5-10% of direct care compensation in similar Guidehouse rate studies for other states, when excluding special vehicle, facility, and equipment costs. Percentages and variation reported by Kentucky's waiver providers are typical and fall within expected range of reported costs.

Transportation

Transportation is an important part of providing services. We developed mileage assumptions (**Table 15**) using the reported travel time from the Provider Cost and Wage Survey and feedback from the Focus Groups. We then multiply total miles traveled in a week by \$.585 per mile as reported by the IRS.

Table 15. Mileage Assumptions

Service ²³	Weekly Mileage
Home-Based Services	111
Respite	51
Adult Day Health Care	20
Day Training	50
Behavioral Services	125

²² Non-payroll program support expenses include program supplies, devices/technology for direct care, activity costs for direct care staff, staff training and development, and other costs.

²³ Shared Living and Financial Management do not receive any transportation adjustments.

Service ²³	Weekly Mileage
Nursing Services	150
Residential Services	30
Technology Assisted Residential	100
Case Management	150
Supported Employment	20
Home Delivered Meals	2,196 daily (assumes 1.75 miles per meal delivered)

Facility and Supply Costs

CMS does not permit the inclusion of room and board in Medicaid rates. For certain services that require specialized facilities but do not cover participants' room and board such as day services and home delivered meals, DMS is able to cover relevant facility expenses (**Table 16**).

Table 16. Facility Costs

Factor	Day Services	Home Delivered Meals
Median Square Footage	4,000	500
Median Cost Per Square Foot	\$16.03	\$20.70

For services that require specialized facilities, DMS is also able to cover cost for non-room and board supplies (**Table 17**). We derived supply costs from the Provider Cost and Wage Survey. We determined daily food costs using the USDA food plan moderate-Cost option for males aged 51-70, annualized.

Table 17. Supply Costs

Factor	Adult Day Health Care	Day Training	Residential	Meals
Supply Cost per Individual per Day	\$0.80	\$1.15	\$0.80	\$0
Meal Cost per Individual per Day	\$8.59	\$0	\$0	\$4,468.35

Occupancy Adjustments

Guidehouse applied an occupancy adjustment to account for days where a facility is not full (**Table 18**). To do so, Guidehouse adjusted the rate by the ratio of scheduled to usual

attendance in a sample month, as reported by providers in the survey. We then applied this ratio to the total hourly employee compensation. Guidehouse then adjusts that value for number of staff and number of individuals served. The factors below represent the median values reported by individual providers in the survey.

Table 18. Occupancy Adjustment Ratio Calculation

Factor ²⁴	Residential Services	Day Services
Scheduled Attendance (A)	365	21
Typical Attendance (B)	357	18
Ratio = A/B	102%	117%

B.5. Rate Methodology

In this section, we describe the methodology used to calculate the rates based on the components described in section B.4. of this report. The methodology may differ slightly for each service based on unit of service and relevant rate components, but the overall approach to analysis relies on the “independent rate build-up” approach described earlier in this report.

B.5.1. Rate Calculation for Non-Residential Services

In this section, we describe the methodology for all non-residential service rate calculations. This includes the following service categories:

- Behavioral Services
- Case Management
- Day Services
- Financial Management
- Home-based Services
- Nursing Services
- Supported Employment

To develop rates, Guidehouse began the calculation with wages and benefits. We adjusted the wages and benefits for the main provider type to account for non-billable time. Guidehouse also adjusted wages and benefits for the supervisor to account for the time spent supervising relative

²⁴ Shared Living does not receive any occupancy adjustments.

to the time spent delivering care or on other administrative duties. When applicable to the service, we also adjusted wages and benefits for other members of the care time to account for the time spent providing care. To get to the direct care component of the rate, we added together wages and benefits for each group (the main provider, supervisors, and other members of the care team).

After adding the wages and benefits, Guidehouse added in adjustments to cover other expenses as needed, applying each adjustment only to applicable services. These other adjustments include additions for patient and employee travel, facility maintenance cost, participant supplies, days when the participant is absent but the provider cannot fill the spot, and general administrative and program support overhead expenses.

Guidehouse then adjusted the rate to account for staff to client ratios where necessary and to account for the appropriate units of service.

After adding all of these costs together for a rate, we inflated rates from the base period of February 2022 to the anticipated implementation period of July 2023.

B.5.2. Rate Calculation for Residential Services

We analyze rates for residential services using a similar methodology to non-residential services. We also add in special considerations for residential services to account for unique units of service, time spent providing care overnight, and other adjustments that are specific to residential services.

To develop rates, Guidehouse began the calculation with wages and benefits. We reviewed the staff to client ratio needed to staff the residential facility during the day and during the night to inform the time spent by all those participating in care in a given home. We adjusted the wages and benefits for the main employee type to account for the time spent in a residential facility as determined by those staffing ratios. This includes time for the primary employees as well as substitute hours for PTO or training in addition to on call hours when necessary. Guidehouse also adjusted wages and benefits for the supervisor to account for the time spent supervising relative to the time spent delivering care or on other administrative duties. When applicable to the service, we also adjusted wages and benefits for other members of the care time to account for the time spent providing care. To get to the direct care component of the rate, we added together wages and benefits for each group (the main provider, supervisors, and other members of the care team).

After adding the wages and benefits, Guidehouse added in adjustments to cover other expenses as needed, applying each adjustment only to applicable services. These other adjustments include additions for patient and employee travel, participant supplies, days when the participant is absent but the provider cannot fill the spot, and general administrative and program support overhead expenses. For residential services, facility costs are not included because CMS policy does not permit room and board to be included in rates.

Guidehouse then adjusted the rate to account for the appropriate units of service. After adding

all of these costs together for a rate, we inflated rates from the base period of February 2022 to the anticipated implementation period of July 2023.

B.5.3. Rate Calculation for Other Service Types

Home-delivered Meals

We calculate the rate for home delivered meals differently than for other services because they are paid on a per-meal basis and have unique considerations, including food and delivery costs.

To develop rates, Guidehouse began the calculation with determining food costs. We determined daily food costs using the USDA food plan moderate-Cost option for males aged 51-70, annualized. Assuming three meals per day, we derived the total cost per meal. We used survey data from one provider's submission (the only home delivered meal provider to submit a survey and the largest home delivered meal provider in the state) to derive the number of meals provided per month.

Guidehouse included wages and benefits for the main cooks and considered the number of cooks needed on average at a given time. We also included wages and benefits for other meal prep and delivery staff. Guidehouse also adjusted wages and benefits for the supervisor to account for the time spent supervising relative to the time spent on other administrative duties.

After adding the wages and benefits and food costs, Guidehouse added in adjustments to cover other expenses as needed. These other adjustments include additions for delivery travel, building and equipment cost, and general administrative and program support overhead expenses.

Guidehouse then adjusted the rate to account for the appropriate units of service. After adding all of these costs together for a rate, we inflated rates from the base period of February 2022 to the anticipated implementation period of July 2023.

Transportation

Transportation is a maximum monthly payment. The rate differs if provided by an individual compared to provided by a public transportation service provider. For public transportation service providers, the rate is the cost per trip as documented by a receipt. For transportation provided by an individual, the individual may be reimbursed at two thirds the rate established in 200 KAR 2:006, Section 8(2)(d) and adjusted quarterly per 200 KAR 2:006, Section 8(2)(d).

To derive a monthly maximum, we assumed that the total mileage would not change from the last time the rate was calculated in 2019, but that the rate per mile would change. Using two thirds the reimbursement rate from 2019 as per the methodology, there is a \$0.27/mile rate. Using the existing monthly maximum of \$265/month, we performed the following calculations.

- Using 2/3 the reimbursement rate from 2019 as per the methodology, there is a \$0.27/mile rate. Using the existing monthly maximum of \$265/month, we derived:
 - $\$265 / \$0.27 = 969.51$ miles per month on average

- Using 2/3 of the current reimbursement rate from 2022, there is a \$0.31/mile rate. Using that rate with the assumed mileage per month, we derived:
 - $\$0.31 * 969.51 = \text{\$297.32 monthly maximum}$

B.6. Benchmark Rate Recommendations

Guidehouse has developed the following benchmark rate recommendations based on the above-defined methodology in **Tables 19 – 26** below:

Table 19. Benchmark Rate Results – Home-Based Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Attendant Care	HCB	15-minute	\$9.08
Attendant Care	MPW	15-minute	\$9.08
Community Access, Individual	SCL	15-minute	\$9.08
Community Access, Group	SCL	15-minute	\$4.54
Community Guide	SCL	15-minute	\$9.08
Community Living Supports	ABI LTC	15-minute	\$9.08
Community Living Supports	MPW	15-minute	\$9.08
Companion	ABI-Acute	15-minute	\$9.08
Homemaker	MPW	15-minute	\$9.08
Personal Assistance	SCL	15-minute	\$9.08
Personal Care	ABI-Acute	15-minute	\$9.08
Personal Care	MPW	15-minute	\$9.08
Non-Specialized Respite	HCB	15-minute	\$8.45
Specialized Respite, Level I	HCB	15-minute	\$8.45
Specialized Respite, Level II	HCB	15-minute	\$8.54
Respite	ABI-Acute	15-minute	\$8.45
Respite	ABI LTC	15-minute	\$8.45
Respite	MPW	15-minute	\$8.45
Respite	SCL	15-minute	\$8.45

Table 20. Benchmark Rate Results – Day Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Adult Day Health Care	ABI LTC	15-minute	\$5.45
Adult Day Health Care	MPW	15-minute	\$5.45
Adult Day Health Care, Level I	HCBS	15-minute	\$5.45
Adult Day Health Care, Level II	HCBS	15-minute	\$5.45
Adult Day Training	ABI-Acute	15-minute	\$5.17
Adult Day Training	ABI LTC	15-minute	\$5.17
Adult Day Training	MPW	15-minute	\$5.17
Adult Day Training	SCL	15-minute	\$5.17
Day Training, Licensed Adult Day Health Center	SCL	15-minute	\$5.45

Table 21. Benchmark Rate Results – Behavioral Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Behavioral Support Service	MPW	15-minute	\$30.90
Behavioral Programming Services	ABI-Acute	15-minute	\$30.90
Behavioral Programming Services	ABI LTC	15-minute	\$30.90
Consultative Clinical & Therapeutic Services (Counseling, Individual)	SCL	15-minute	\$30.43
Consultative Clinical & Therapeutic Services (Dietary)	SCL	15-minute	\$19.34
Consultative Clinical & Therapeutic Services (Behavioral)	SCL	15-minute	\$30.90
Counseling, Individual	ABI-Acute	15-minute	\$30.43
Counseling, Individual	ABI LTC	15-minute	\$30.43
Counseling, Group	ABI-Acute	15-minute	\$7.61
Counseling, Group	ABI LTC	15-minute	\$7.61
Person-Centered Coaching	SCL	15-minute	\$10.69
Positive Behavior Support Plan	SCL	15-minute	\$30.90

Table 22. Benchmark Rate Results – Nursing Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Nursing Supports	ABI LTC	15-minute	\$22.85
Skilled Services LPN	MIIW	Hourly	\$66.19
Skilled Services RN	MIIW	Hourly	\$91.38
Skilled Services RT	MIIW	Hourly	\$76.32

Table 23. Benchmark Rate Results – Residential Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Supervised Residential Care, Level I	ABI-Acute	Calendar day	\$365.98
Supervised Residential Care, Level I	ABI LTC	Calendar day	\$365.98
Supervised Residential Care, Level II	ABI-Acute	Calendar day	\$277.55
Supervised Residential Care, Level II	ABI LTC	Calendar day	\$277.55
Supervised Residential Care, Level III	ABI-Acute	Calendar day	\$157.38
Supervised Residential Care, Level III	ABI LTC	Calendar day	\$157.38
Residential Support, Level I, 4-8 residents	SCL	24-hour	\$272.48
Residential Support, Level I, 3 or less residents	SCL	24-hour	\$342.80
Residential Support, Level II, 12+ hours supervision	SCL	24-hour	\$283.85
Residential Support, Level II, Less than 12 hours supervision	SCL	24-hour	\$185.59
Shared Living	SCL	Monthly	\$891.14
Technology Assisted Residential	SCL	24-hour	\$137.15

Table 24. Benchmark Rate Results – Case Management

Service	Waiver	Unit	Rate Study Benchmark Rate
Case Management	ABI-Acute	Monthly	\$335.61
Case Management	ABI LTC	Monthly	\$335.61
Case Management	MPW	Monthly	\$335.61
Case Management	SCL	Monthly	\$335.61
Case Management	HCBS	Monthly	\$335.61

Table 25. Benchmark Rate Results – Supported Employment

Service	Waiver	Unit	Rate Study Benchmark Rate
Supported Employment	ABI-Acute	15-minute	\$15.05
Supported Employment	ABI LTC	15-minute	\$15.05
Supported Employment	MPW	15-minute	\$15.05
Supported Employment	SCL	15-minute	\$15.05

Table 26. Benchmark Rate Results – Miscellaneous Services

Service	Waiver	Unit	Rate Study Benchmark Rate
Financial Management Services	ABI-Acute	Monthly	\$140.46
Financial Management Services	ABI LTC	Monthly	\$140.46
Financial Management Services	MPW	Monthly	\$140.46
Financial Management Services	SCL	Monthly	\$140.46
Financial Management Services	HCBS	Monthly	\$140.46
Home-Delivered Meals	HCBS	Per meal	\$9.92
Transportation	SCL	Per Trip	\$297.32

B.7. Fiscal Impact Overview

As a part of determining final rate recommendations, Guidehouse analyzed how proposed rate benchmarks would affect projected expenditures in an effort to estimate the fiscal impact of increased rates for DMS as well as providers delivering services across the State. We conducted this analysis exclusively for the purposes of the rate study, to assess the implications of increasing funding for services to the levels identified by rate study benchmarks. However, our analysis includes several simplifying assumptions that, while warranted for projection purposes, may not reflect eventual service utilization or future federal financial participation. Moreover, these assumptions represent Guidehouse's best judgment based on the utilization data available, but do not necessarily reflect State legislative or executive decision-making, nor do they indicate additional commitments to future financing.

In the following sub-section, Guidehouse describes the data sources for our utilization assumptions, including the service periods reflected in the data as well as any service exclusions or other limitations that frame the data set. The analysis also considers factors that influenced utilization assumptions and our approach to addressing these factors, including COVID-19 service impacts or utilization patterns sensitive to reimbursement increase. With these caveats in mind, the report presents the fiscal impact to the service overall as well as by each waiver, detailing projected total and "state share" expenditures.

B.7.1. Baseline Data and Projection Assumptions

While rate studies typically rely on expenditure data and utilization assumptions based on the most recently completed year of payments, data concerns or service delivery anomalies sometimes warrant exception to this general preference for more recent utilization data. In the case of the present study, the public health emergency prompted by COVID-19 led to a systemic disruption of service delivery that significantly altered patterns of utilization, resulting in claims data unrepresentative of prior service volume as well as likely utilization in the future. Although Guidehouse had more recent data, we ruled out the use of the Calendar Year (CY) 2020 or 2021 service period as a base period for projection due to reduced evident utilization, as well as other distortions in the mix of service provision due to the emergency.

The service period reflected in CY 2019 is the most recent annual period entirely free of COVID-19 impacts. The merit of the CY 2019 service period is that it is both largely reflective of the pre-COVID CY 2019 data (where claims from that period are complete), and in representing the full range of service utilization across the system. For these reasons, Guidehouse chose to use the CY 2019 period as the baseline for fiscal projection. We adjusted the data to account for cases where CY 2019 data was missing or the rate units were changing.

We do understand that the CY 2019 historical service volume may be different than future utilization. To account for this, we applied trending factors based on the more recent data we had available and based on national trends to account for anticipated changes in utilization.

While it is possible some services experiencing substantial rate increases may see higher utilization due to new revenue incentives to deliver these services, it is too soon to predict whether rate adequacy alone is sufficient to address workforce shortages that may have contributed previously to depressed utilization or challenges to access to care. Given the uncertain economic climate, the complexity of the dynamics operating in the current labor market, and the difficulty in gauging consumer and provider behavior post-COVID, Guidehouse declined to make additional rate-influenced adjustments to utilization based on our own speculative trending assumptions. We also did not apply trending for newly available slots or waitlist changes.

Finally, the projections presented later in this section should not be taken as a representation of the total budget for the multitude of programs involved in the study. Services such as Participant-Directed Goods and Services and Vehicle Modification are not billed at standard rates, but at the specific cost to the provider and reimbursed on a case-by-case basis. These types of services exemplify “pass-through” costs to the provider that would not change under the benchmark projection. In addition, we did not include services outside of the rate study in this analysis.

B.7.2. Fiscal Impact Projections

The analysis identifies fiscal impact in terms of both total expenditure increases and the additional state share dollars needed to fund services at the proposed benchmark rate. Projected state share impacts are also subject to simplified federal participation assumptions that may deviate from actual Federal Medical Assistance Percentage (FMAP) levels depending on several factors, including time of implementation and the relative proportion of Medicaid expansion and non-expansion beneficiaries receiving services.

In SFY 2024, Kentucky’s Medicaid FMAP is 71.78%²⁵, which means the federal government will cover 71.78% of expenditures for standard Medicaid services, with Kentucky’s state share covering the remaining 28.22% of reimbursement costs. While these ratios hold true for the vast

²⁵ Source from KFF at <https://www.kff.org/medicaid/state-indicator/federal-matching-rate-and-multiplier/?currentTimeframe=1&selectedRows=%7B%22states%22:%7B%22kentucky%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

majority of services and Medicaid members included in the rate study, there are several exceptions to this relationship, in which federal reimbursement may be different than the standard FMAP. For example, services for individuals in the Expansion population receive a higher FMAP. Each of these enhanced FMAP conditions potentially exerts an influence on the ultimate state share of total expenditures. Our fiscal impact does not attempt to model these potential enhancements. Guidehouse chose to apply conservative federal participation assumptions, opting to err on the side of *overstating* rather than *understating* the financial implications for decision-makers of fully funding these benchmarks.

Comparisons between current rates and the benchmarks developed by Guidehouse included only the reimbursement rates in DMS' effective fee schedules, without considering other payments the Department may make to providers as a part of total reimbursement to facilitate a true "apples-to-apples" comparison between current and benchmark rates.

Table 27 shows the fiscal impact of funding rate changes to the full benchmark rate for all services included in the rate study. The table includes a projection of expenditures if service utilization were to be paid at benchmark rates, which is compared to a set of baseline current expenditures both pre- and post- COVID-19 rate changes. To identify the overall fiscal impact, a figure that reflects new expenditures needed to finance benchmark rates (representing the "Difference" between benchmark and post-COVID-19 spending). While the analysis indicated service arrays for both populations warrant some level of rate increase, the need for additional funding is not proportionate across all populations as demonstrated by the tables below.

Table 27. Fiscal Impact by Waiver (State and Federal Share)

Waiver	Total Pre-COVID-19 Cost	Total Post-COVID-19 Cost	Total Benchmark Cost	Difference between Post-COVID-19 Cost and Benchmark Cost	Percent Difference
ABI LTC	\$29,990,559	\$40,210,454	\$47,364,977	\$7,154,522	17.8%
ABI-Acute	\$16,163,352	\$21,854,398	\$24,932,782	\$3,078,384	14.1%
HCBS	\$302,438,635	\$369,192,800	\$498,737,605	\$129,544,804	35.1%
MIW	\$2,013,451	\$2,013,451	\$5,023,517	\$3,010,066	149.5%
MPW	\$463,271,291	\$560,151,678	\$702,380,452	\$142,228,774	25.4%
SCL	\$385,389,112	\$507,443,653	\$671,294,176	\$163,850,522	32.3%
Total	\$1,199,266,400	\$1,500,866,435	\$1,949,733,509	\$448,867,073	29.9%

The total cost to implement the full benchmark rates as recommended by Guidehouse is \$1.9 billion in state and federal dollars. Given the basic 71.78/28.22 percentage split in federal and state contributions, the state share constitutes a third of the total additional funding needed. As

described in **Table 28**, based on this ratio, the total costs to the state to implement rate updates will be \$550 million. That represents an increase in state funding of \$126 million, compared to the current level of state funding for total 1915(c) waiver spend which is \$424 million.

Table 28. Fiscal Impact by Waiver (State Share Only)

Waiver	Total Pre-COVID-19 Cost	Total Post-COVID-19 Cost	Total Benchmark Cost	Difference between Post-COVID-19 Cost and Benchmark Cost	Percent Difference
ABI LTC	\$8,463,336	\$11,347,390	\$13,366,396	\$2,019,006	17.8%
ABI-Acute	\$4,561,298	\$6,167,311	\$7,036,031	\$868,720	14.1%
HCBS	\$85,348,183	\$104,186,208	\$140,743,752	\$36,557,544	35.1%
MIIW	\$568,196	\$568,196	\$1,417,637	\$849,441	149.5%
MPW	\$130,735,158	\$158,074,803	\$198,211,763	\$40,136,960	25.4%
SCL	\$108,756,807	\$143,200,599	\$189,439,216	\$46,238,617	32.3%
Total	\$338,432,978	\$423,544,508	\$550,214,796	\$126,670,288	29.9%

The collective impact of these state share reductions is a price tag of \$126 million for DMS, assuming full funding of the benchmark rates for current participants.

C. Future Considerations in Spring 2024 (Amended Summer 2024)

C.1. April 2024 Addendum

As of April 2024, DMS elected to increase rates to 70% of the benchmark rate. DMS also elected to maintain rate increases implemented by Appendix K waivers, which is the rate that will be implemented for a waiver service if the current rate paid exceeds the 70% of study-established benchmark rate threshold. The 2024 General Assembly finalized House Bill 6 (the approved budget for SFY 2025 and SFY 2026) and authorized funding to implement rates aligned with 70% of the benchmark rates.²⁶

For the MPW and HCB waivers, DMS will increase case management rates above the benchmark rate study rate to match the SCL case management rate. DMS will maintain case management rates for ABI, ABI-LTC, and SCL at current rates.

In addition, providers offering specific services are eligible for a 50% rate increase if the provider signed an attestation in which they agreed to pass through 85% of the rate to direct care workers (the workforce responsible to directly provide care to participants as specified in the service definition) in the form of compensation increases, hiring and retention bonuses and other reimbursement-related incentives to recover and maintain a sufficient workforce. DMS will maintain the rate with a supplemental add on for DSP wage pass-through in cases where the supplemental add-on rate is higher than 70% of the benchmark rate and providers have signed an attestation.

The service and waivers eligible for the 50% supplemental add-on rate increase where that increase is higher than 70% of the benchmark include:

- Attendant Care (HCB)
- Community Access (SCL)
- Community Guide (SCL)
- Community Living Supports (ABI LTC, MPW)
- Companion (ABI Acute)
- Homemaker (MPW)
- Personal Assistance (SCL)
- Personal Care (ABI-Acute, MPW)
- Respite (ABI-Acute, ABI LTC)
- Specialized Respite (HCB)

²⁶ Source: Kentucky General Assembly House Bill 6, found at <https://apps.legislature.ky.gov/recoreddocuments/bill/24RS/hb6/bill.pdf>

Guidehouse recommends the Cabinet for Health and Family Services (“the Cabinet”) and the General Assembly revisit rates each year to identify and plan to implement any necessary inflationary adjustments. In addition, we recommend the Cabinet rebase rates every 5 years aligned with CMS requirements. Given that DMS will maintain some current rates that are above 100% of the rate study benchmark results, DMS may consider working closely with CMS on approval of such rates.

On April 22, 2024, CMS finalized the *Ensuring Access to Medicaid Services* final rule, which includes new federal requirements for states pertaining to payment for direct services. In six years, states must “generally ensure a minimum of 80% of Medicaid payments for homemaker, home health aide, and personal care services be spent on compensation for direct care workers furnishing these services, as opposed to administrative overhead or profit, subject to certain flexibilities and exceptions (referred to as the HCBS payment adequacy provision.”²⁷ Due to developing rates in 2022 / 2023, we did not account for this upcoming 80% pass through requirement. We recommend the Cabinet revisit rates prior to the 2030 CMS deadline to ensure 80% of the payment rate for homemaker, home health aide, and personal care services are related to direct care worker compensation.

C.2. Rates Planned for Implementation Based on Policy and Programmatic Decisions

As described in Section C.1, DMS made several policy and programmatic decisions to prevent rate reductions. The rates planned for implementation are shown in **Tables 29-36** below.

Table 29. Rates for Implementation – Home-Based Services

Service	Waiver	Unit	Rate Planned for Implementation
Attendant Care	HCBS	15-minute	\$7.26
Attendant Care with 50% supplemental add-on	HCBS	15-minute	\$9.00
Attendant Care	MPW	15-minute	\$6.36
Community Access, Individual	SCL	15-minute	\$10.65
Community Access, Individual with 50% supplemental add-on	SCL	15-minute	\$13.20
Community Access, Group	SCL	15-minute	\$5.32
Community Access, Group with 50% supplemental add-on	SCL	15-minute	\$6.60
Community Guide	SCL	15-minute	\$10.65
Community Guide with 50% supplemental add-on	SCL	15-minute	\$13.20
Community Living Supports	ABI LTC	15-minute	\$6.73

²⁷ Source: CMS Fact Sheet, found at <https://www.cms.gov/newsroom/fact-sheets/ensuring-access-medicaid-services-final-rule-cms-2442-f#:~:text=Requires%20that%2C%20in%20six%20years,subject%20to%20certain%20flexibilities%20and>

Service	Waiver	Unit	Rate Planned for Implementation
Community Living Supports with 50% supplemental add-on	ABI LTC	15-minute	\$8.34
Community Living Supports	MPW	15-minute	\$6.70
Community Living Supports with 50% supplemental add-on	MPW	15-minute	\$8.31
Companion	ABI-Acute	15-minute	\$6.73
Companion with 50% supplemental add-on	ABI-Acute	15-minute	\$8.34
Homemaker	MPW	15-minute	\$7.87
Homemaker with 50% supplemental add-on	MPW	15-minute	\$9.75
Personal Assistance	SCL	15-minute	\$7.37
Personal Assistance 50% supplemental add-on	SCL	15-minute	\$9.14
Personal Care	ABI-Acute	15-minute	\$6.73
Personal Care with 50% supplemental add-on	ABI-Acute	15-minute	\$8.34
Personal Care	MPW	15-minute	\$9.08
Personal Care with 50% supplemental add-on	MPW	15-minute	\$11.25
Non-Specialized Respite	HCB	15-minute	\$5.92
Specialized Respite, Level I	HCB	15-minute	\$5.92
Specialized Respite, Level I with 50% supplemental add-on	HCB	15-minute	\$6.00
Specialized Respite, Level II	HCB	15-minute	\$12.10
Specialized Respite, Level II with 50% supplemental add-on	HCB	15-minute	\$15.00
Respite	ABI-Acute	15-minute	\$5.92
Respite with 50% supplemental add-on	ABI-Acute	15-minute	\$6.00
Respite	ABI LTC	15-minute	\$5.92
Respite with 50% 50% supplemental add-on	ABI LTC	15-minute	\$6.00
Respite	MPW	15-minute	\$5.92
Respite	SCL	15-minute	\$5.92

Table 30. Rates for Implementation – Day Services

Service	Waiver	Unit	Rate Planned for Implementation
Adult Day Health Care	ABI LTC	15-minute	\$3.86
Adult Day Health Care	MPW	15-minute	\$3.82
Adult Day Health Care, Level I	HCB	15-minute	\$3.82
Adult Day Health Care, Level II	HCB	15-minute	\$4.15
Adult Day Training	ABI-Acute	15-minute	\$4.88

Service	Waiver	Unit	Rate Planned for Implementation
Adult Day Training	ABI LTC	15-minute	\$4.88
Adult Day Training	MPW	15-minute	\$3.62
Adult Day Training	SCL	15-minute	\$3.62
Day Training, Licensed Adult Day Health Center	SCL	15-minute	\$3.99

Table 31. Rates for Implementation – Behavioral Services

Service	Waiver	Unit	Rate Planned for Implementation
Behavioral Support Service	MPW	15-minute	\$40.23
Behavioral Programming Services	ABI-Acute	15-minute	\$40.67
Behavioral Programming Services	ABI LTC	15-minute	\$40.31
Consultative Clinical & Therapeutic Services (Counseling, Individual)	SCL	15-minute	\$29.95
Consultative Clinical & Therapeutic Services (Dietary)	SCL	15-minute	\$29.95
Consultative Clinical & Therapeutic Services (Behavioral)	SCL	15-minute	\$29.95
Counseling, Individual	ABI-Acute	15-minute	\$28.85
Counseling, Individual	ABI LTC	15-minute	\$28.85
Counseling, Group	ABI-Acute	15-minute	\$6.96
Counseling, Group	ABI LTC	15-minute	\$6.96
Person-Centered Coaching	SCL	15-minute	\$7.66
Positive Behavior Support Plan	SCL	Per Plan	\$885.12

Table 32. Rates for Implementation – Nursing Services

Service	Waiver	Unit	Rate Planned for Implementation
Nursing Supports	ABI LTC	15-minute	\$30.25
Skilled Services LPN	MIIW	Hourly	\$46.33
Skilled Services RN	MIIW	Hourly	\$63.97
Skilled Services RT	MIIW	Hourly	\$53.42

Table 33. Rates for Implementation – Residential Services

Service	Waiver	Unit	Rate Planned for Implementation
Supervised Residential Care, Level I	ABI-Acute	Calendar day	\$300.00
Supervised Residential Care, Level I	ABI LTC	Calendar day	\$300.00
Supervised Residential Care, Level II	ABI-Acute	Calendar day	\$225.00
Supervised Residential Care, Level II	ABI LTC	Calendar day	\$225.00
Supervised Residential Care, Level III	ABI-Acute	Calendar day	\$112.50
Supervised Residential Care, Level III	ABI LTC	Calendar day	\$112.50
Residential Support, Level I, 4-8 residents	SCL	24-hour	\$215.09
Residential Support, Level I, 3 or less residents	SCL	24-hour	\$284.57
Residential Support, Level II, 12+ hours supervision	SCL	24-hour	\$198.70
Residential Support, Level II, Less than 12 hours supervision	SCL	24-hour	\$129.91
Shared Living	SCL	Monthly	\$726.00
Technology Assisted Residential	SCL	24-hour	\$105.15

Table 34. Rates for Implementation – Case Management

Service	Waiver	Unit	Rate Planned for Implementation
Case Management	ABI-Acute	Monthly	\$525.14
Case Management	ABI LTC	Monthly	\$453.75
Case Management	MPW	Monthly	\$425.92
Case Management	SCL	Monthly	\$425.92
Case Management	HCB	Monthly	\$425.92

Table 35. Rates for Implementation – Supported Employment

Service	Waiver	Unit	Rate Planned for Implementation
Supported Employment	ABI-Acute	15-minute	\$10.54
Supported Employment	ABI LTC	15-minute	\$10.54
Supported Employment	MPW	15-minute	\$10.54
Supported Employment	SCL	15-minute	\$13.65

Table 36. Rates for Implementation – Miscellaneous Services

Service	Waiver	Unit	Rate Planned for Implementation
Financial Management Services	ABI-Acute	Monthly	\$121.00
Financial Management Services	ABI LTC	Monthly	\$121.00
Financial Management Services	MPW	Monthly	\$121.00
Financial Management Services	SCL	Monthly	\$121.00
Financial Management Services	HCB	Monthly	\$196.63
Home-Delivered Meals	HCB	Per meal	\$9.08
Transportation	SCL	Per Trip	\$320.65

Table 37 shows the fiscal impact of funding the rates described in Section C.1 for services included in the rate study²⁸. The table includes a projection of expenditures if service utilization were to be paid at the Rate Planned for Implementation shown in Tables 29-36.

Table 37. Fiscal Impact by Waiver with Rates for Implementation

Waiver	Total Cost of Implemented Rates (State + Federal)	Total Cost of Implemented Rates (State Share Only)
ABI LTC	\$40,853,961	\$11,528,988
ABI-Acute	\$22,027,889	\$6,216,270
HCB	\$483,708,942	\$136,502,663
MIIW	\$3,516,427	\$992,336
MPW	\$655,036,392	\$184,851,270
SCL	\$537,612,977	\$151,714,382
Total	\$1,742,756,588	\$491,805,909

The total cost to implement the rates planned for implementation is \$1.7 billion in state and federal dollars. The ratio of federal to state share is 71.78 / 28.22. Based on this ratio, the total costs to the state to implement rate updates will be \$492 million. That represents an increase in

²⁸ We assumed that all providers who signed an attestation will continue to receive the enhanced rate with supplemental add on for DSP wage pass-through.

state funding of \$68 million, as compared to the current level of state funding for total 1915(c) waiver spend which is \$424 million²⁹.

C.3. Summary and Future Considerations

Based on the rate study process and results, Guidehouse identified several policy considerations for DMS to consider as it plans to adopt and implement proposed benchmark rates for 1915(c) waiver programs. As HB 6 has already funded 70% of the rate study benchmark rates, DMS should consider future budget planning and rate updates that would advance rates close to 100% of study-identified benchmark going forward. Advancing toward 100% of study-identified benchmarks will help DMS achieve one of its primary rate-setting objectives – achieving rate parity for like services across waivers. Given that we inflated the rates to July 1, 2023 with an anticipated implementation date at the start of SFY 2024, DMS may also consider reviewing inflation on an annual or semi-annual basis to account for align with changing provider needs and market conditions as biennial state budgets are planned and requested.

Once finalized, DMS will need to amend waivers and Kentucky Administrative Regulation to reflect the changes discussed in this report and to obtain CMS approval.

²⁹ \$423 million total costs are based on cost projections to estimate the fiscal impact of rates mandated by SFY 2023-2024 House Bill 1.