



State of West Virginia

Department of Human Services

Optum response to Maintenance and Operations Services for WV PATH RFP

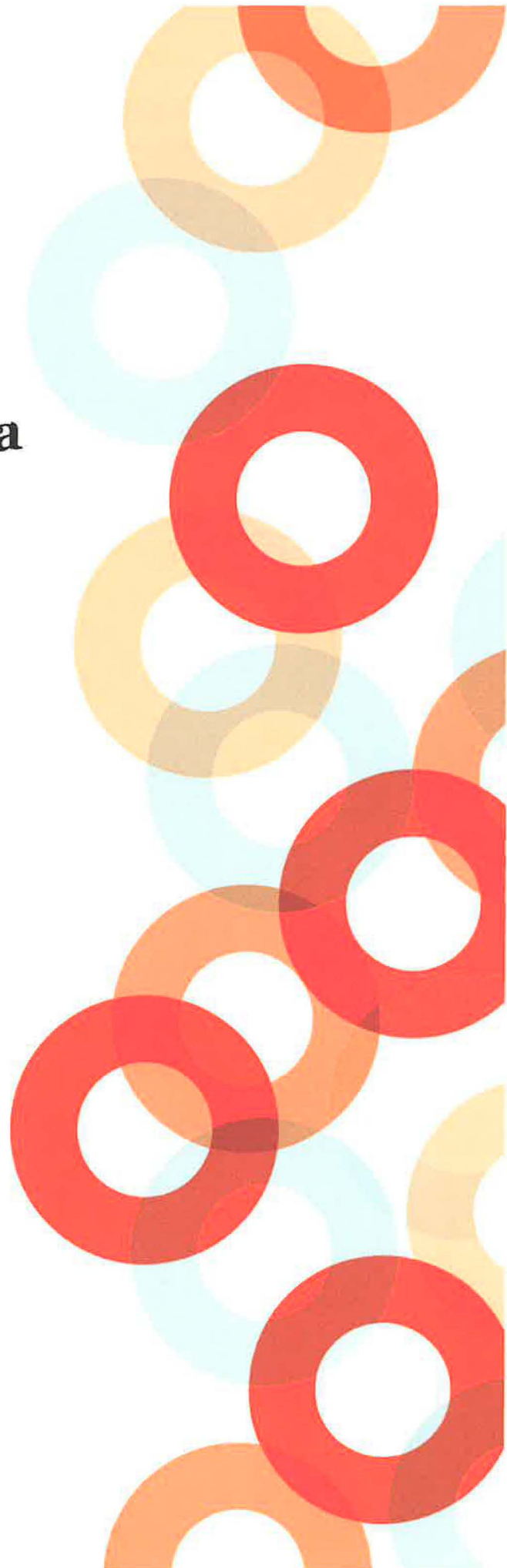
Part Two: Cost Proposal
Solicitation No. CRFP 0511 HHR2600000001

Date

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Attachment B: Cost Sheet

The Vendor should submit the cost proposal in a separate sealed envelope, clearly marked as Cost Proposal. If applicable, sign and submit the attached Resident Vendor Preference Certificate with the cost proposal.

The State expects a fixed contract cost for the project. Vendors must clearly state that "all-inclusive fixed prices" include all costs associated with delivery, including, but not limited to: labor, subcontracts, materials, supplies, equipment, fees, taxes, overhead costs, general and administrative expenses, and profit.

Vendors should clearly differentiate which services are included in the fixed monthly M&O fee and which services are to be billed separately under the enhancement and modification funding pools. The specifications listed in Appendix VIII are considered optional and should not be included in the proposed pricing. For Agency-approved work above and beyond the fixed monthly M&O services, the State intends to utilize the Vendor's all-inclusive hourly rates, as outlined in Attachment B: Cost Sheet.

The Vendor should complete the cost tables provided in this RFP based on the scope of services described in this RFP. M&O costs should be included starting from the planned date of submission for the Completion of Transition Milestone, pending acceptance by DoHS. DoHS assumes the transition will take approximately six (6) months. Accordingly, the total cost for Year 1 of M&O should reflect an estimated six (6) months of service.

DoHS intends to continue modernizing the system throughout the term of this contract. As modernization efforts progress, certain services originally planned under this procurement may be reduced or eliminated. Consequently, each line item in Table 2 (Maintenance and Operations [M&O] Cost) represents a unique commodity line that will correspond to distinct modules in the resulting contract. This structure ensures flexibility for the State to adjust scope and pricing based on evolving modernization priorities without impacting unrelated services or modules. Vendors should anticipate that modernization may result in a decrease in maintenance and operations activities for specific modules over time, and pricing should reflect this modular, commodity-based approach.

Vendors must complete and submit the Labor Rate Card provided in Attachment B, Table 5. This table must list all staff positions anticipated for use under the contract, including the minimum required qualifications and all-inclusive hourly rate. Blended hourly rates will not be accepted in lieu of position-specific rates.

In addition to the Labor Rate Card, vendors must provide a Basis of Estimate narrative to explain how both fixed prices and hourly rates were developed. This should include key pricing assumptions, such as estimated labor hours per role, rationale for role selection, and the method used to arrive at proposed pricing.

Failure to include the Labor Rate Card and the Basis of Estimate may result in the proposal being deemed non-responsive.

Attachment B contains five separate cost tables:

1. Project Deliverable and Milestone Cost
2. Maintenance and Operations Cost
3. Enhancement Cost
4. All-Inclusive Total Cost
5. Labor Rate Card

Table 1: Project Deliverable and Milestone Cost

Project Deliverable and Milestone Cost	
Item	Total
All-Inclusive Project Deliverable and Milestone Cost (See Appendix II: Deliverables, Milestones, and Payments)	\$4,059,515

Table 2: Maintenance and Operations (M&O) Cost

Maintenance and Operations (M&O) Cost		
Period	Monthly Cost	Total (Monthly Cost x 12 Months)
Year 1*		
Child Welfare (CW)	\$481,595	\$2,889,570
Child Support (CS)	\$378,826	\$2,272,956
Family Assistance (FA)	\$704,617	\$4,227,702
Child Care (CC)	\$113,900	\$683,400
Shared Services (SS)	\$1,698,584	\$10,191,504
Key Staff**	\$386,171	\$2,317,026
Year 1 Total:		\$22,582,158
Year 2		
Child Welfare (CW)	\$307,720	\$3,692,640
Child Support (CS)	\$378,032	\$4,536,384
Family Assistance (FA)	\$567,578	\$6,810,936
Child Care (CC)	\$140,821	\$1,689,852
Shared Services (SS)	\$3,006,670	\$36,080,040
Key Staff**	\$395,167	\$4,742,004
Year 2 Total:		\$57,551,856
Year 3		
Child Welfare (CW)	\$286,353	\$3,436,236
Child Support (CS)	\$295,753	\$3,549,036
Family Assistance (FA)	\$470,652	\$5,647,824
Child Care (CC)	\$134,913	\$1,618,956
Shared Services (SS)	\$2,266,347	\$27,196,164
Key Staff**	\$406,232	\$4,874,784
Year 3 Total:		\$46,323,000
Year 4		
Child Welfare (CW)	\$245,878	\$2,950,536
Child Support (CS)	\$242,292	\$2,907,504
Family Assistance (FA)	\$400,197	\$4,802,364

Maintenance and Operations (M&O) Cost		
Period	Monthly Cost	Total (Monthly Cost x 12 Months)
Child Care (CC)	\$139,211	\$1,670,532
Shared Services (SS)	\$1,115,547	\$13,386,564
Key Staff**	\$417,629	\$5,011,548
Year 4 Total:		\$30,729,048
Year 5		
Child Welfare (CW)	\$191,032	\$2,292,384
Child Support (CS)	\$191,082	\$2,292,984
Family Assistance (FA)	\$391,398	\$4,696,776
Child Care (CC)	\$143,648	\$1,723,776
Shared Services (SS)	\$973,076	\$11,676,912
Key Staff**	\$429,368	\$5,152,416
Year 5 Total:		\$27,835,248
Year 6		
Child Welfare (CW)	\$196,763	\$2,361,156
Child Support (CS)	\$196,814	\$2,361,768
Family Assistance (FA)	\$403,140	\$4,837,680
Child Care (CC)	\$125,797	\$1,509,564
Shared Services (SS)	\$965,419	\$11,585,028
Key Staff**	\$441,459	\$5,297,508
Year 6 Total:		\$27,952,704
Year 7		
Child Welfare (CW)	\$202,665	\$2,431,980
Child Support (CS)	\$202,719	\$2,432,628
Family Assistance (FA)	\$377,732	\$4,532,784
Child Care (CC)	\$129,852	\$1,558,224
Shared Services (SS)	\$1,003,174	\$12,038,088
Key Staff**	\$453,913	\$5,446,956
Year 7 Total:		\$28,440,660

Maintenance and Operations (M&O) Cost		
Period	Monthly Cost	Total (Monthly Cost x 12 Months)
Year 8		
Child Welfare (CW)	\$208,745	\$2,504,940
Child Support (CS)	\$185,294	\$2,223,528
Family Assistance (FA)	\$389,064	\$4,668,768
Child Care (CC)	\$134,041	\$1,608,492
Shared Services (SS)	\$1,042,471	\$12,509,652
Key Staff**	\$466,740	\$5,600,880
Year 8 Total:		\$29,116,260
Year 9		
Child Welfare (CW)	\$215,008	\$2,580,096
Child Support (CS)	\$190,853	\$2,290,236
Family Assistance (FA)	\$400,736	\$4,808,832
Child Care (CC)	\$101,211	\$1,214,532
Shared Services (SS)	\$1,060,658	\$12,727,896
Key Staff**	\$479,953	\$5,759,436
Year 9 Total:		\$29,381,028
Year 10		
Child Welfare (CW)	\$183,501	\$2,202,012
Child Support (CS)	\$196,578	\$2,358,936
Family Assistance (FA)	\$412,758	\$4,953,096
Child Care (CC)	\$104,565	\$1,254,780
Shared Services (SS)	\$1,102,550	\$13,230,600
Key Staff**	\$493,561	\$5,922,732
Year 10 Total:		\$29,922,156
All-Inclusive Maintenance and Operations Cost		\$329,834,118
GRAND TOTAL:		

*As described in the RFP, and for purposes of proposal and evaluation, all vendors should estimate operations cost for Year 1 to include six (6) months of costs to provide consistent evaluation of all cost bids. Under the awarded contract, Maintenance and Operations costs will not be allowable until DoHS has accepted the M002 Completion of Project Management Plan and M003 Completion of Transition Milestones.

**** Key Staff:**

- Only the Key Staff roles identified in Appendix IV: Staff Qualifications, Experience, and Responsibilities shall be priced under this line item. All other personnel required to operate, maintain, or support the system, including module-specific resources, shall be priced within the applicable solution or module line items in Table 2.
- The annual cost for each Key Staff position shall be calculated using the fully loaded, all-inclusive hourly labor rates identified in Table 5, multiplied by 1,800 hours per year. For purposes of cost estimation, the monthly cost should be calculated using the fully loaded, all-inclusive hourly labor rates identified in Table 5, multiplied by 150 hours per month.
- Vendor invoices must include detailed itemization by Key Staff role and align with the maximum allowable annual cost per position based on 1,800 hours. For each invoicing period, the Vendor shall report the total number of hours worked by each Key Staff member. Monthly invoiced amounts shall be prorated based on actual hours worked relative to the 1,800-hour annual baseline.
- Billing for any Key Staff position shall not exceed the proportionate monthly equivalent of 1,800 hours per year, and shall be reduced accordingly when fewer hours are worked. No billing shall be permitted for hours not actually worked.
- Upon request, the Vendor shall provide a staffing report separate from the invoice. At a minimum, the report shall include Key Staff role, personnel name, hours worked, other reported time, and applicable hire and termination dates.
- Key Staff rates must include all labor, payroll, overhead, profit, travel, per diem, materials, administrative costs, staff training, project facilities, licenses, taxes, safety, delivery, and any other expenses required to fulfill the requirements of this contract. No additional costs shall be billed to the State for these items.

Table 3: Modifications and Enhancements Cost

Modifications and Enhancements Cost*					
Period	Hourly Rate	Hours	Total Hourly Cost (Hourly Rate x 180,000 hours)	Direct Cost Pool	Total Cost (Hourly Cost + Direct Cost)
Year 1	\$95.20	180,000	\$17,136,000	\$400,000	\$17,536,000
Year 2	\$98.00	180,000	\$17,640,000	\$400,000	\$18,040,000
Year 3	\$100.90	180,000	\$18,162,000	\$400,000	\$18,562,000
Year 4	\$103.90	180,000	\$18,702,000	\$400,000	\$19,102,000
Year 4	\$107.00	180,000	\$19,260,000	\$400,000	\$19,660,000
Year 6	\$110.20	180,000	\$19,836,000	\$400,000	\$20,236,000
Year 7	\$113.50	180,000	\$20,430,000	\$400,000	\$20,830,000
Year 8	\$116.90	180,000	\$21,042,000	\$400,000	\$21,442,000
Year 9	\$120.40	180,000	\$21,672,000	\$400,000	\$22,072,000
Year 10	\$124.00	180,000	\$22,320,000	\$400,000	\$22,720,000
All-Inclusive Modifications and Enhancements Cost			\$196,200,000	\$4,000,000	\$200,200,000
GRAND TOTAL:					

*Vendors must include a basis of estimate in their cost proposal that explains how proposed hourly rates for enhancements and modifications were developed. This should include assumptions, labor categories, and rationale for labor hours.

Table 4: All-Inclusive Total Cost

All-Inclusive Total Cost	
Service	Cost
Total Project Deliverable, Milestone, and Project Phase Cost: (Table 1 Total Cost)	\$4,059,515
Total Maintenance and Operations Cost: (Table 2 Total Cost)	\$329,834,118
Total Modifications and Enhancements Cost: (Table 3 Total Cost)	\$200,200,000
GRAND TOTAL PROJECT COST:	\$534,093,633

Table 5: Labor Rate Card

Labor Rate Card All-Inclusive Hourly Rates*												
Staff Position	Key Staff (Y/N)	Minimum Qualifications	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
PATH Account Manager	Y	See RFP Section 4.3.2.3	\$215	\$221	\$228	\$235	\$242	\$249	\$256	\$264	\$272	\$280
PATH Deputy Account Manager/Operations Manager	Y	See RFP Section 4.3.2.3	\$287	\$296	\$305	\$314	\$323	\$333	\$343	\$353	\$364	\$375
PATH Project Manager	Y	See RFP Section 4.3.2.3	\$227	\$234	\$241	\$248	\$255	\$263	\$271	\$279	\$287	\$296
PATH FA/Medicaid Line of Business Manager	Y	See RFP Section 4.3.2.3	\$142	\$146	\$150	\$155	\$160	\$165	\$170	\$175	\$180	\$185
PATH CC Line of Business Manager	Y	See RFP Section 4.3.2.3	\$249	\$256	\$264	\$272	\$280	\$288	\$297	\$306	\$315	\$324
PATH CW Line of Business Manager	Y	See RFP Section 4.3.2.3	\$150	\$154	\$159	\$164	\$169	\$174	\$179	\$184	\$190	\$196
PATH CS Line of Business Manager	Y	See RFP Section 4.3.2.3	\$323	\$333	\$343	\$353	\$364	\$375	\$386	\$398	\$410	\$422
PATH System Manager	Y	See RFP Section 4.3.2.3	\$253	\$261	\$269	\$277	\$285	\$294	\$303	\$312	\$321	\$331
Test Manager	Y	See RFP Section 4.3.2.3	\$226	\$233	\$240	\$247	\$254	\$262	\$270	\$278	\$286	\$295
Security Manager	Y	See RFP Section 4.3.2.3	\$192	\$198	\$204	\$210	\$216	\$222	\$229	\$236	\$243	\$250
Change Control Manager	Y	See RFP Section 4.3.2.3	\$123	\$127	\$131	\$135	\$139	\$143	\$147	\$151	\$156	\$161
Deliverables/Requirements Manager	Y	See RFP Section 4.3.2.3	\$217	\$224	\$231	\$238	\$245	\$252	\$260	\$268	\$276	\$284
Architect			\$134	\$138	\$142	\$146	\$150	\$155	\$160	\$165	\$170	\$175
Associate Director General Management			\$142	\$146	\$150	\$155	\$160	\$165	\$170	\$175	\$180	\$185
Business Analyst			\$122	\$126	\$130	\$134	\$138	\$142	\$146	\$150	\$155	\$160

Labor Rate Card All-Inclusive Hourly Rates*												
Staff Position	Key Staff (Y/N)	Minimum Qualifications	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Business Systems Analyst			\$111	\$114	\$117	\$120	\$124	\$128	\$132	\$136	\$140	\$144
Data Engineer			\$102	\$105	\$108	\$111	\$114	\$117	\$121	\$125	\$129	\$133
DevOps Engineer			\$202	\$208	\$214	\$220	\$227	\$234	\$241	\$248	\$255	\$263
Director General Management			\$244	\$251	\$259	\$267	\$275	\$283	\$291	\$300	\$309	\$318
Director Software Engineering			\$180	\$185	\$191	\$197	\$203	\$209	\$215	\$221	\$228	\$235
Director Technology			\$194	\$200	\$206	\$212	\$218	\$225	\$232	\$239	\$246	\$253
Lead DevOps Engineer			\$163	\$168	\$173	\$178	\$183	\$188	\$194	\$200	\$206	\$212
Lead Software Engineer			\$197	\$203	\$209	\$215	\$221	\$228	\$235	\$242	\$249	\$256
Manager Project Management			\$93	\$96	\$99	\$102	\$105	\$108	\$111	\$114	\$117	\$121
Manager Software Engineering			\$96	\$99	\$102	\$105	\$108	\$111	\$114	\$117	\$121	\$125
Network Consultant			\$118	\$122	\$126	\$130	\$134	\$138	\$142	\$146	\$150	\$155
Network Engineer			\$148	\$152	\$157	\$162	\$167	\$172	\$177	\$182	\$187	\$193
Project Manager			\$158	\$163	\$168	\$173	\$178	\$183	\$188	\$194	\$200	\$206
Quality Engineer			\$155	\$160	\$165	\$170	\$175	\$180	\$185	\$191	\$197	\$203
Senior Architect			\$168	\$173	\$178	\$183	\$188	\$194	\$200	\$206	\$212	\$218
Senior Architect Analyst			\$199	\$205	\$211	\$217	\$224	\$231	\$238	\$245	\$252	\$260
Senior Business Analyst			\$159	\$164	\$169	\$174	\$179	\$184	\$190	\$196	\$202	\$208
Senior Manager Business Systems Analysis			\$141	\$145	\$149	\$153	\$158	\$163	\$168	\$173	\$178	\$183

Labor Rate Card All-Inclusive Hourly Rates*

Staff Position	Key Staff (Y/N)	Minimum Qualifications	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Senior Manager Data Engineering			\$132	\$136	\$140	\$144	\$148	\$152	\$157	\$162	\$167	\$172
Senior Manager, Software Engineering			\$125	\$129	\$133	\$137	\$141	\$145	\$149	\$153	\$158	\$163
Senior Project Manager			\$126	\$130	\$134	\$138	\$142	\$146	\$150	\$155	\$160	\$165
Senior Software Engineer			\$116	\$119	\$123	\$127	\$131	\$135	\$139	\$143	\$147	\$151
Software Engineer			\$137	\$141	\$145	\$149	\$153	\$158	\$163	\$168	\$173	\$178
Sr Data Engineer			\$195	\$201	\$207	\$213	\$219	\$226	\$233	\$240	\$247	\$254
Sr DevOps Engineer			\$125	\$129	\$133	\$137	\$141	\$145	\$149	\$153	\$158	\$163
Trainer			\$145	\$149	\$153	\$158	\$163	\$168	\$173	\$178	\$183	\$188

***Notes:**

- Annual rate increases must not exceed 3% per contract year.
- The table shall be used to provide contractor and subcontractor fully loaded hourly labor rates for all classifications and grades of personnel. These rates must include all labor, payroll, overhead, profit, travel, per diem, materials, administrative costs, staff training, project facilities, licenses, taxes, safety, delivery, and any other expenses required to fulfill the requirements of this contract. No additional costs shall be billed to the State for these items.
- The Agency may use the "Labor Rates" supplied by the Vendor as a rate card for future change requests during all project phases and contract years.
- Vendor may include additional roles to describe the various classifications and grades of its personnel. Vendors may insert additional rows as required (e.g. a Senior-Level Programmer and a Junior-Level Programmer require two separate rows).

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Basis of Estimate Narrative

In addition to the Labor Rate Card, vendors must provide a Basis of Estimate narrative to explain how both fixed prices and hourly rates were developed. This should include key pricing assumptions, such as estimated labor hours per role, rationale for role selection, and the method used to arrive at proposed pricing.

Failure to include the Labor Rate Card and the Basis of Estimate may result in the proposal being deemed non-responsive.

Labor -Maintenance & Operations, Transition, and Transformation

1. Purpose and scope of this narrative

This Basis of Estimate (BOE) narrative accompanies the Labor Rate Card and explains how the labor component of our proposed pricing was developed. Our narrative offers transparency and includes the details required in the RFP for DoHS to evaluate our pricing approach. Optum is willing to provide additional details above what is required in the RFP; however, because this narrative may become a public record, we can provide these proprietary detailed methodologies to DoHS subject to appropriate confidentiality protections.

2. Method used to arrive at proposed pricing

Our proposed pricing was developed from a bottom-up at the individual position level rather than top-down from a target price, a ratio, or a percentage of the incumbent contract value. The method proceeds in six steps.

1. **Establish the baseline.** The proposed staffing model was compiled position by position, capturing each resource's function, delivery organization, and line-of-business assignment. This model is the foundation for the estimate: it reflects the effort required to operate the system today, not a theoretical construct.
2. **Map each position to an RFP labor category.** Every position was mapped to one of the 41 labor categories defined for this procurement, so that the estimate is expressed in the same role vocabulary as the Labor Rate Card and can be priced without interpretation.
3. **Assign monthly effort.** We estimated the hours for each position for each month of the 120-month contract. We used 150 hours per month as one full-time person. Looking at the work month by month helps us show when operations start, how long modernization work lasts, and how staffing goes down over time.
4. **Allocate capacity across service areas and apply the modernization plan.** We built the staffing model from the work needed to operate and improve the WV PATH system. We first looked at the expected maintenance and operations workload, including incidents, problems, and service requests. We then assigned staff across the service areas needed to support production operations, meet governance and security responsibilities, manage systems and infrastructure, and deliver modernization and enhancements. The model keeps enough baseline capacity in place to support day-to-day M&O, while also reflecting efficiencies expected from automation, AI-assisted workflows, cloud modernization, fewer support tickets, and other technology improvements. Those efficiencies were applied where the work is expected to change—by role, module, and workstream—not as a flat reduction across the entire contract. As

more work moves from routine maintenance to modernization and automation-enabled operations, the staffing mix is adjusted and capacity is shifted among service areas.

5. **Roll up to roles and years.** Monthly hours are aggregated to annual hours per position, then to annual hours per RFP labor category, then to annual hours per work stream and module. Every rollup is a summation of the same underlying monthly cells, so the role view and the module view reconcile to the identical total.

The price is driven by the staffing plan, not the other way around. When the role, number of staff, or length of time changes in the staffing model, the price changes in a clear, direct, and traceable way.

3. Key pricing assumptions

The following assumptions are the foundation of the labor estimate. They are stated here because they materially affect the proposed price, and because a change in any of them changes the estimate in a predictable way.

3.1 Productive hours and the definition of an FTE

One full-time equivalent is priced at 150 productive hours per month, or 1,800 hours per contract year. This is the unit of measure throughout the model, with fractional allocations (for example, 75 hours for a half-time assignment) used where a role is shared.

3.2 Phasing of the contract start

Operational staffing and Other Direct Costs begin in contract month 7. Months 1 through 6 are a transition and takeover period staffed by key personnel and by the teams that are performing migration of West Virginia technology assets. This assumption is the single largest driver of the difference between Year 1 and Year 2 pricing.

3.3 Efficiency and transformation assumptions

The staffing reduction curve reflects a documented set of efficiency assumptions carried out in the source model:

- An initial reduction against the current operating baseline in the first year, driven by adoption of AI-assisted agentic workflows, expanded automation, and deliberate reduction of problem and incident volumes.
- Additional efficiency gains targeted in the second and third years, a further step in the fourth year, a larger step in the fifth year, and a sustained annual efficiency thereafter across all modules.
- Scaled adoption of AI-assisted automation for operational activities, and AI-assisted workflows supporting code generation, problem and incident analysis, and root-cause identification.
- Completion of migration and modernization within the first two years, establishing a streamlined platform that requires less sustaining effort.
- A structured workforce transformation during the first two years that re-profiles the work mix toward the appropriate skill level for each activity.

These assumptions were applied separately to each module and role instead of using one flat percentage across the whole model. As a result, the year-over-year reductions are not the same every year. The reductions are larger in Years 4 and 5 as modernization benefits take effect,

and smaller in later option years as staffing gets closer to the minimum level needed to operate the program. Overall, the pricing still follows the planned efficiency path.

4. Role structure

Program Leadership & Key Personnel (18.6%)

Roles included: Twelve named key personnel positions: the PATH Account Manager and Deputy Account Manager/Operations Manager, the PATH Project Manager, the PATH System Manager, a dedicated Line of Business Manager for each of Family Assistance/Medicaid, Child Support, Child Welfare, and Child Care, and the Security Manager, Change Control Manager, Deliverables/Requirements Manager, and Test Manager.

These positions are required by the RFP as key personnel and are responsible for contract performance. From Years 2 through 10, each role is estimated as one full-time person at 1,800 hours per year, not as a shared or partial role. In Year 1, each role is estimated at 900 hours to reflect the transition ramp-up.

For the System Manager and Test Manager, we also include an additional 900 hours in Year 1 so the outgoing and incoming leads can overlap during knowledge transfer. This helps avoid a handoff where one person leaves before the next person is fully ready.

We also assign a dedicated Line of Business Manager to each program area instead of combining oversight under fewer managers. This gives the State one clear point of contact for each program area. Because these leadership roles remain fully dedicated, this role family stays constant at 21,600 hours per year while other role families decrease over time.

Delivery Management & Supervision (13.4%)

Roles included: Directors and managers of software engineering, general management directors and associate directors, senior managers of data engineering, business systems analysis, and DevOps engineering, and managers of project management.

This family provides the working supervision layer between key personnel and the delivery teams: work intake and prioritization, capacity and assignment decisions, technical quality gates, and escalation. Effort declines from Year 2 to Year 10 as the teams being supervised shrink and the management structure flattens.

Architecture & Technical Leadership (5.5%)

Roles included: Senior Architect Analysts, Architects, Principal Engineers, and Lead Software Engineers.

Architecture effort is weighted toward the first four years, peaking in Years 2 through 4, because that is when the modernization target state is designed and the migration is executed. It then settles to a sustaining level sufficient to govern technical direction, review significant changes, and maintain design integrity. The Architect category ends after Year 4 as migration-specific design work completes, while Senior Architect Analyst and Lead Software Engineer continue at a steady level for the remainder of the term.

Application Engineering (37.4%)

Roles included: Software Engineers and Senior Software Engineers.

This is the largest family in the estimate, which is the expected shape for a maintenance and operations contract on a large integrated eligibility system: the preponderance of recurring work

is defect correction, regulatory and policy change implementation, interface and batch maintenance, and enhancement delivery. Engineering effort peaks in Year 2, when modernization and remediation run concurrently with operations, and settles by Year 10.

Business Analysis (14.1%)

Roles included: Business Analysts, Senior Business Analysts, and Business Systems Analysts.

Business analysts are staffed at a substantial and durable level because eligibility programs are driven by continuous federal and State policy change. Requirements elicitation, policy interpretation, impact analysis, and acceptance support are recurring obligations, not project-phase activities. Under-resourcing this family is a common failure mode on eligibility contracts; the estimate funds it as ongoing capacity.

Quality Engineering (3.5%)

Roles included: Quality Engineers

Quality engineering is concentrated in Years 1 and 2 to validate the migrated and modernized platform and the remediated requirements, then reduces to a sustaining level per year. The reduction is predicated on automated regression coverage being established during the transformation window; the estimate assumes that investment holds, and that manual regression effort does not return.

DevOps, Data & Infrastructure Engineering (4.2%)

Roles included: DevOps Engineers and Senior DevOps Engineers, Data Engineers and Senior Data Engineers, and Network Engineers.

DevOps, Data, and Infrastructure Engineering support is concentrated in Years 1 and 2 and ends after Year 5. This work builds the deployment pipelines, monitoring, data engineering foundation, and platform migration needed to achieve later-year efficiencies. Once those capabilities are in place, the remaining support is handled by the engineering and management teams instead of a separate team. This shows how early investment helps reduce long-term effort.

Project & Program Management (3.4%)

Roles included: Senior Project Managers and Project Managers.

These roles represent project management capacity beyond the key personnel PATH Project Manager, sized to the concurrent project load. Effort is highest in Years 1 and 2 when transition, migration, remediation, and certification run in parallel, and reduces to per year once the program is in steady-state operations.

Training (0.1%)

Roles included: Trainer.

A small amount of training support is included for targeted knowledge transfer during transition. Most training will be handled by the teams doing the day-to-day work, rather than by a separate training team.

5. Estimated labor hours by role

The table below presents estimated hours for every RFP labor category in the estimate, organized by role family. "Peak FTE" is the highest concurrent full-time-equivalent level the category reaches in any single year, and "Lines" is the number of discrete position lines in the model that carry the category. Together these two columns distinguish a category staffed by a few people for the full term from one staffed by many people briefly.

RFP labor category	Yr 1	Yr 2	Yr 3	Yr 5	Yr 10	Total hours	Peak FTE	Lines
Program Leadership & Key Personnel								
PATH System Manager	1,800	1,800	1,800	1,800	1,800	18,000	1.0	1
Test Manager	1,800	1,800	1,800	1,800	1,800	18,000	1.0	1
Change Control Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
Deliverables/Requirements Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH CC Line of Business Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH Account Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH CS Line of Business Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH CW Line of Business Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH FA/Medicaid Line of Business Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH Deputy Account Manager/Operations Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
PATH Project Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
Security Manager	900	1,800	1,800	1,800	1,800	17,100	1.0	1
Delivery Management & Supervision								
Manager Software Engineering	900	1,800	9,000	5,400	5,400	51,300	5.0	6
Director Software Engineering	1,800	3,600	3,600	3,600	3,600	34,200	2.0	4
Senior Manager, Software Engineering	3,600	7,200	1,800	1,800	0	23,400	4.0	5
Associate Director General Management	900	1,800	1,800	1,800	1,800	17,100	1.0	2
Director General Management	900	1,800	1,800	1,800	0	9,900	1.0	2
Manager Project Management	3,375	1,125	11	0	0	4,511	3.8	4

RFP labor category	Yr 1	Yr 2	Yr 3	Yr 5	Yr 10	Total hours	Peak FTE	Lines
Senior Manager Data Engineering	900	1,800	0	0	0	2,700	1.0	1
Senior Manager Business Systems Analysis	900	1,800	0	0	0	2,700	1.0	1
Sr Mgr DevOps Engineering	900	1,800	0	0	0	2,700	1.0	1
Director Technology	450	0	0	0	0	450	0.5	1
Architecture & Technical Leadership								
Senior Architect Analyst	1,800	3,600	1,800	1,800	1,800	19,800	2.0	3
Lead Software Engineer	900	1,800	1,800	1,800	1,800	17,100	1.0	2
Principal Engineer, TLCP	900	1,800	1,800	1,800	0	13,500	1.0	2
Architect	1,350	1,800	3,600	0	0	10,350	2.0	4
Application Engineering								
Software Engineer	9,900	18,000	50,400	32,400	28,800	296,100	28.0	45
Senior Software Engineer	40,010	51,343	3,600	3,600	3,600	120,153	44.5	48
Business Analysis								
Business Analyst	9,775	15,566	14,400	12,600	10,800	124,341	10.9	23
Senior Business Analyst	4,500	9,000	1,800	1,800	1,800	27,900	5.0	6
Business Systems Analyst	900	1,800	1,800	0	0	4,500	1.0	2
Quality Engineer	9,120	13,713	3,600	1,800	1,800	39,033	10.1	20
DevOps, Data & Infrastructure Engineering								
DevOps Engineer	8,550	9,000	1,800	900	0	22,050	9.5	10
Sr DevOps Engineer	6,300	3,600	1,800	900	0	14,400	7.0	8
Data Engineer	2,250	3,150	0	0	0	5,400	2.5	3
Sr Data Engineer	4,020	0	0	0	0	4,020	4.5	6
Network Engineer	450	0	0	0	0	450	0.5	1
Project & Program Management								
Senior Project Manager	4,561	6,007	3,600	1,800	1,800	28,568	5.1	10
Project Manager	1,800	3,600	1,800	0	0	9,000	2.0	2
Training								
Trainer	20	5	0	0	0	25	0.0	1
Total -all roles	134,331	188,109	133,211	97,200	84,600	1,112,651	—	238

Estimated labor hours by RFP labor category. Years 4, 6, 7, 8 and 9 are omitted from the display for legibility; the total column reflects all ten years, and the complete year-by-year detail is available in the source model.

6. How price is derived from the labor model

The **Labor Model** determines the staffing quantities required to deliver the proposed services. It is a bottom-up, requirements-based model developed from our experience providing system development, modernization, and maintenance & operations services for complex government programs. Resource quantities are calculated by role and function based on the work required to meet contractual obligations and service commitments.

The Labor Rate Card supplies unit prices. Price is the product of the two, computed at the lowest level of detail and summed upward -never estimated at the summary level and allocated downward.

6.1 How the hourly rates were developed

Rates in the Labor Rate Card are built as fully burdened hourly rates by labor category and contract year. The build-up is constructed as follows:

1. **Direct labor.** For internally supplied roles, the direct labor element is derived from actual compensation for the relevant role, informed by the incumbent roster and by market compensation data for the applicable labor market. For subcontracted labor, the direct element is the negotiated subcontractor rate.
2. **Escalation.** Applied year over year across the ten-year term to reflect expected compensation and price growth. Escalation is applied to the rate, not to the hours; the hour quantities in Section 7 are stated in constant terms.

The same rate is used for each labor category everywhere it appears, no matter which module or workstream it supports. For example, a Software Engineer supporting Child Welfare is priced at the same rate as a Software Engineer supporting Family Assistance.

6.2 How the fixed prices were developed

Each fixed price is based on the underlying labor estimate. We calculate the hours and rates for the covered scope, sum the total, and present it in the fixed-price format required by the RFP.

- **Recurring M&O fixed price.** The Core M&O hours for a contract year are extended at the applicable rates and summed to an annual labor price, then divided into equal monthly amounts to produce a firm-fixed monthly price for that year. Because the staffing model declines year over year, each year carries its own fixed monthly amount rather than a single figure escalated across the term. Year 1 is priced to reflect that operations commence in month 7.
- **Non-recurring fixed prices.** Migration and modernization, remediation of requirements not met, certification support, migration of State technology assets, and Tier-0 integration are each priced by extending their own hours at the applicable rates. Because these work streams have defined durations and end states, they are priced as discrete fixed amounts payable against completion rather than folded into the recurring monthly price.
- **Transition fixed price.** The transition effort in contract months 1 through 6 are extended at the applicable rates to produce the takeover price. Keeping this separate from the recurring price makes sure that the State does not pay a transition premium for the remaining nine and a half years of the term.

Our fixed prices are easy to review and verify. Each price is built from named roles, estimated hours, and published rates. There is no hidden adjustment or added factor between the staffing model and the final price.

6.3 What our acceptance of fixed price means

By offering these as fixed prices, we take on the risk if our efficiency and staffing assumptions are too optimistic. If AI-assisted automation does not save as much effort as expected, if incident volumes do not go down, or if we cannot shift the work mix as planned, we will still meet the committed service levels at our own cost. The price to the State will not change.

7. Rationale for role selection

Roles were selected on the following principles, applied consistently across all role categories.

1. **Anchored in demonstrated need.** We based the role structure on the team currently operating PATH. We selected roles based on the work that is actually being done, not on a theoretical staffing chart, so the estimate can be tied back to the current team position by position.
2. **Expressed in the RFP's own vocabulary.** Every position is mapped to one of the 41 RFP labor categories so that the estimate, the Labor Rate Card, and the State's evaluation all use the same role definitions. No position is priced against a category that does not appear in the rate card.
3. **Key personnel dedicated, not shared.** Each of the twelve RFP key personnel positions is staffed at one dedicated full-time person. Line of Business Managers are dedicated per program area rather than consolidated, preserving a single accountable point of contact for each program.
4. **Skill matched to the work, not to precedent.** Where the modernized platform and AI-assisted tooling lower the skill threshold for routine work, the role is re-profiled to the appropriate practitioner level and senior capacity is retained where it adds genuine value -architecture, escalation, and technical governance. This is the basis of the mix shift in Section 8.
5. **Transformation roles time-bounded.** These roles are included only while migration, modernization, remediation, and certification work is underway. Once that work is complete, the roles are removed and are not included in the ongoing recurring price.
6. **Continuity protected at the handoff.** The estimate includes temporary overlap for the System Manager and Test Manager during transition to protect knowledge transfer and reduce handoff risk on this complex system.
7. **Supply channel chosen for stability.** Approximately 88 percent of hours are assigned to internal delivery organizations, which reduces exposure to supplier rate volatility across a ten-year term and keeps institutional knowledge of the PATH solution inside the delivery organization.

8. Summary

The BOE explains that our WV PATH labor pricing is built from a transparent, bottom-up staffing model rather than a target price. Labor is mapped to RFP labor categories, estimated by role, module, workstream, and contract year, and phased to reflect transition, full M&O, modernization, and long-term efficiency. The model shows Year 1 ramp-up, Year 2 peak effort as operations and modernization overlap, and steady reductions thereafter as automation, AI-

assisted workflows, cloud modernization, and platform improvements reduce sustaining effort. Overall, the narrative presents the fixed labor price as auditable, traceable, and risk-bearing: if staffing or efficiency assumptions do not materialize as planned, Optum remains responsible for meeting committed service levels at no additional cost to the State.

Labor - Enhancement Pool Hours

1. Purpose and scope of this narrative

This Basis of Estimate (BOE) narrative accompanies the Labor Rate Card and explains how the Enhancement Pool component of our proposed pricing was developed. Where the recurring M&O narrative describes a declining, requirements-based staffing model priced as fixed monthly amounts, this narrative describes a pool of labor capacity that DoHS draws against, on an hourly basis, to direct enhancements and changes to WV PATH after the base scope is delivered.

What the Enhancement Pool is. The Enhancement Pool is a block of blended engineering, analysis, quality, and management capacity that the State uses to fund discretionary enhancements, regulatory-driven changes, and modernization requests that fall outside recurring maintenance and operations. It is priced hourly against the Labor Rate Card so that each drawdown is transparent and directly traceable to named roles and published rates. The role composition presented in this narrative describes the labor pyramid Optum would field if the State elects to exercise the full 180,000 hours in a given year; it is an illustrative full-exercise staffing mix, not a fixed or guaranteed block of capacity. The State is not obligated to consume the full pool, and the hours it directs may vary from year to year. If fewer hours are consumed, the role mix scales accordingly and the labor pyramid adjusts — senior and specialized roles are retained where the work requires them, while build-level capacity flexes with actual demand.

2. Method used to arrive at proposed pricing

The Enhancement Pool was developed from the bottom up, at the individual role level, rather than top-down from a target price, a ratio, or a percentage of the incumbent contract value. The method proceeds in six steps.

- **Establish the pool ceiling.** The pool provides up to 15,000 productive hours per month, which equals up to 180,000 hours per contract year and up to 1,800,000 hours across the ten-year term if fully exercised. Sizing the pool this way gives the State ready capacity to direct change without a separate procurement for each request, while leaving the State free to consume as much or as little of it as needed.
- **Compose the pool by role.** The 180,000 annual hours are distributed across 25 discrete roles that reflect the skill mix required to design, build, test, and release enhancements to an integrated eligibility platform.
- **Map each role to an RFP labor category.** Every role in the pool is mapped to one of the labor categories defined for this procurement, so the estimate is expressed in the same role vocabulary as the Labor Rate Card and can be priced without interpretation.
- **Express effort in FTE-equivalent terms.** Consistent with the recurring M&O model, one full-time equivalent is 150 productive hours per month, or 1,800 hours per contract year. The 180,000-hour annual pool therefore equals 100 blended FTE of standing enhancement capacity at full exercise.
- **Model the roles at full exercise.** The role composition in this narrative reflects the labor pyramid Optum would field if the State exercised the full 180,000 hours in a year. It is a

planning basis, not a guarantee of constant capacity: the hours the State actually consumes may vary year to year, and the role mix flexes with that consumption rather than being re-baselined by a fixed annual figure.

- **Roll up and price.** Annual hours aggregate by role, then by RFP labor category, then to the pool total, reconciling to the identical 180,000-hour total. Price is the product of pool hours and the applicable Labor Rate Card rate, computed at the lowest level and summed upward.

The price is driven by the composition of the pool, not the other way around. When a role, the number of hours, or the rate changes, the price changes in a clear, direct, and traceable way.

3. Key pricing assumptions

The following assumptions are the foundation of the Enhancement Pool estimate. They are stated here because they materially affect the proposed price, and because a change in any of them changes the estimate in a predictable way.

3.1 Productive hours and the definition of an FTE

One full-time equivalent is priced at 150 productive hours per month, or 1,800 hours per contract year. This is the unit of measure throughout the pool. Fractional allocations are expressed directly in hours (for example, a role carrying 3,600 annual hours represents 2.0 FTE of standing capacity).

3.2 Pool ceiling and full-exercise basis

The pool provides up to 15,000 hours per month (up to 180,000 hours per year) that the State may elect to exercise. The role composition presented here reflects full annual exercise of the pool; it is not a commitment that the full pool will be consumed or that capacity remains constant across the term. The State is not obligated to draw the full pool, and if fewer hours are consumed the labor pyramid adjusts accordingly — senior and specialized roles are retained where the work requires them while build-level capacity flexes with demand.

3.3 Hourly pricing and drawdown

The pool is priced on an hourly basis against the Labor Rate Card. Enhancement work is authorized and consumed from the pool at the fully burdened hourly rate for the labor category performing the work. Because pricing is hourly rather than fixed, the State pays only for capacity it directs and can verify each drawdown against named roles and published rates.

3.4 Blended composition and skill mix

The pool intentionally blends senior and practitioner-level engineering with business analysis, quality engineering, and supervisory capacity so that a typical enhancement can be delivered end to end — requirements, design, build, test, and release — without drawing on the recurring M&O team. The mix reflects the composition of work an integrated eligibility platform typically generates, weighted toward application engineering and business analysis.

4. Role structure

At full exercise, the pool is organized into nine role families. The distribution below is the expected shape for an enhancement pool serving a large integrated eligibility system: the preponderance of discretionary change is application engineering and policy-driven business

analysis, supported by quality engineering and a thin layer of delivery and project management. If the State directs fewer than the full 180,000 hours, this mix scales and the labor pyramid adjusts rather than remaining fixed.

Role family	Annual hours	Pool FTE	% of pool
Application Engineering	70,200	39.0	39.0%
Business Analysis	32,400	18.0	18.0%
Quality Engineering & Test	28,800	16.0	16.0%
Delivery Management & Supervision	12,600	7.0	7.0%
AI & Emerging Technology	10,800	6.0	6.0%
Project & Program Management	10,800	6.0	6.0%
DevOps, Data & Infrastructure Engineering	7,200	4.0	4.0%
Architecture & Technical Leadership	3,600	2.0	2.0%
User Experience	3,600	2.0	2.0%
Total annual pool	180,000	100.0	100.0%

Enhancement Pool composition by role family at full annual exercise. Percentages are of the 180,000-hour pool ceiling; the mix scales if fewer hours are consumed.

Application Engineering (39.0%)

Roles included: Software Engineer, Associate Software Engineer, and Senior Software Engineer. This is the largest family in the pool, which is the expected shape for enhancement work on an integrated eligibility system: most discretionary change is new functionality, interface and batch extension, and regulatory or policy implementation. The blend of associate, mid, and senior engineers lets routine build work be matched to the appropriate practitioner level while retaining senior capacity for complex change.

Business Analysis (18.0%)

Roles included: Business Analyst, Senior Business Analyst, and Manager Business Analysis. Enhancement demand on eligibility programs is driven by continuous federal and State policy change. The pool funds durable analysis capacity for requirements elicitation, policy interpretation, impact analysis, and acceptance support so that each enhancement is scoped and validated before implementing.

Quality Engineering & Test (16.0%)

Roles included: Associate Quality Analyst, Quality Engineer, Quality Engineering Manager, and Principal Quality Engineer. Quality capacity is sized to validate each enhancement against the modernized platform and to extend automated regression coverage as change is delivered, protecting production stability while the pool is consumed.

Delivery Management & Supervision (7.0%)

Roles included: Senior Manager Software Engineering. This family provides the working supervision layer for pool-funded work: intake and prioritization, capacity and assignment decisions, technical quality gates, and escalation, so that enhancement delivery is governed rather than ad hoc.

AI & Emerging Technology (6.0%)

Roles included: Senior AI/ML Engineer. This capacity supports the use of AI and automation to deliver approved enhancements more efficiently and improve the productivity of the broader enhancement team.

Project & Program Management (6.0%)

Roles included: Senior Project Manager, Manager Project Management, and Senior Manager Project Management. Project management capacity is sized to the concurrent enhancement load, coordinating scope, schedule, and release across parallel change requests.

DevOps, Data & Infrastructure Engineering (4.0%)

Roles included: Principal Network Engineer, Network Engineer, Senior DevOps Engineer, and Information Security Engineer. Capacity to build and maintain the deployment, monitoring, network, and security foundations that enhancement delivery depends on, and to confirm each change is released securely.

Architecture & Technical Leadership (2.0%)

Roles included: Senior Architect and Architect. A sustaining level of architecture capacity to govern technical direction, review significant changes, and maintain design integrity as enhancements accrue.

User Experience (2.0%)

Roles included: Senior UX Engineer and UX Engineer. This capacity helps confirm portal and workflow enhancements are designed with client and worker usability in mind, making the system easier to navigate and use.

5. RFP labor category mapping

The table below maps every role in the Enhancement Pool to its corresponding RFP labor category, with the annual pool hours and the FTE-equivalent standing capacity each represents at full exercise. The mapping validates the estimate, the Labor Rate Card, and the State's evaluation all use the same role definitions. The annual total reconciles to 180,000 hours.

RFP labor category	Annual pool hours	Pool FTE
Software Engineer	36,000	20.0
Associate Software Engineer	21,600	12.0
Senior Software Engineer	12,600	7.0
Senior Business Analyst	14,400	8.0

RFP labor category	Annual pool hours	Pool FTE
Business Analyst	10,800	6.0
Manager Business Analysis	7,200	4.0
Associate Quality Analyst	10,800	6.0
Quality Engineer	10,800	6.0
Quality Engineering Manager	5,400	3.0
Principal Quality Engineer	1,800	1.0
Senior Manager Software Engineering	12,600	7.0
Senior AI/ML Engineer	10,800	6.0
Senior Project Manager, I	3,600	2.0
Senior Project Manager, II	3,600	2.0
Manager Project Management	1,800	1.0
Senior Manager Project Management	1,800	1.0
Principal Network Engineer	1,800	1.0
Network Engineer	1,800	1.0
Senior DevOps Engineer	1,800	1.0
Information Security Engineer	1,800	1.0
Senior Architect	1,800	1.0
Architect	1,800	1.0
Senior UX Engineer	1,800	1.0
UX Engineer	1,800	1.0
Grand Total	180,000	100.0

RFP labor category mapping. Hours shown reflect full annual exercise of the pool (up to 180,000 hours per year; up to 1,800,000 hours over ten years). Actual consumption, and therefore the role mix, may be lower and may vary year by year.

6. How price is derived from the pool

The pool determines the standing capacity; the Labor Rate Card supplies unit prices. Price is the product of the two, computed at the lowest level of detail and summed upward — never estimated at the summary level and allocated downward.

6.1 How the hourly rates were developed

Rates in the Labor Rate Card are built as fully burdened hourly rates by labor category and contract year. For internally supplied roles, the direct labor element is derived from actual compensation for the relevant role, informed by the incumbent roster and by market compensation data for the applicable labor market. For subcontracted labor, the direct element is the negotiated subcontractor rate. Escalation is applied year over year across the ten-year term to reflect expected compensation and price growth; escalation is applied to the rate, not to the hours, so the 180,000-hour annual pool is stated in constant terms.

The same rate is used for each labor category wherever it appears, regardless of the module or workstream an enhancement supports. For example, a Software Engineer enhancing Child Welfare is priced at the same rate as a Software Engineer enhancing Family Assistance.

6.2 How the pool price is presented

The Enhancement Pool is priced as hourly capacity rather than as a fixed deliverable. At full annual exercise, 180,000 hours are extended at the applicable Labor Rate Card rates for the categories that compose the pool and summed to an annual pool value; year over year, that value changes only because the rate escalates, not because the modeled role composition changes. Actual charges to the State are made only for the hours the State directs and authorizes against the pool, so if the State consumes fewer than 180,000 hours in a year it pays only for what it uses, and the role mix scales to match.

7. Rationale for role selection

Roles were selected on the following principles, applied consistently across all categories in the pool.

- **Anchored in demonstrated need.** The pool reflects the types of skills PATH enhancement work requires today. It is based on the roles currently used to deliver changes to the platform, not on a theoretical staffing model.
- **Expressed in the RFP's own vocabulary.** Every role in the pool is mapped to an RFP labor category so that the estimate, the Labor Rate Card, and the State's evaluation all use the same definitions.
- **Weighted to where change originates.** Application engineering and business analysis carry the largest shares because that is where discretionary and policy-driven change concentrates on a platform supporting Family Assistance, Child Welfare, Child Care and Child Support.
- **Skill matched to the work.** The blend of associate, mid, senior, and principal levels lets routine enhancement work be delivered at the appropriate practitioner level while senior capacity is retained for architecture, escalation, and technical governance.
- **Flexes with consumption.** The role model is presented at full annual exercise of the pool; if the State directs fewer hours, the mix scales and the labor pyramid adjusts, retaining senior and specialized roles where the work requires them while build-level capacity flexes with demand.

8. Summary

This BOE explains how Optum developed the WV PATH Enhancement Pool pricing. The pricing is built from the roles, hours, and rates needed to support enhancement work, rather than from a pre-set target price. The pool provides up to 15,000 hours per month, 180,000 hours per year, and 1,800,000 hours over the ten-year term, which the State may use to direct approved enhancements and changes.

The role mix shown in this narrative represents the staffing model if the State uses the full annual pool. It is a planning estimate, not a guarantee that the same level of capacity will be used at all times. If the State uses fewer hours, the role mix scales down and adjusts based on the work being requested. Each role is mapped to an RFP labor category, calculated using 1,800 hours per FTE per year, and priced using the Labor Rate Card.

The pool is weighted toward application engineering and business analysis because those roles are most often needed to deliver system enhancements, policy changes, and discretionary improvements on an integrated eligibility system. This approach creates a clear and traceable estimate where price is tied directly to roles, hours, and published rates, and where the State pays only for the enhancement capacity it directs.

Other Direct Costs -Maintenance & Operations, Transition, and Transformation

Currently WV Path technology footprint is comprised of three main environments: Optum Private Cloud (OFE), WV Path Data Center, and Ensono (Mainframe hosting), which Optum proposes consolidating into a single AWS Cloud tenancy owned by the State of West Virginia.

Our pricing assumes consolidation into AWS creates efficiency benefits through standardized hosting patterns, managed services where appropriate, improved utilization of compute capacity, and more consistent automation for provisioning, monitoring, backup, and recovery.

The model uses existing workload inventory as the sizing baseline, applies adjustments only where cloud operating characteristics materially change the capacity or support model, and assumes that common tier 0 services, shared platform capabilities, and active cost-management practices reduce duplication across environments while preserving resiliency and operational control.

Each of the three environments (Mainframe-hosted, West Virginia data center-hosted, and Optum Private Cloud / OFE-hosted) have different runtime patterns, database dependencies, integration points, resiliency models, tooling, and operational support assumptions, therefore the pricing does not apply a single conversion factor across the full estate. Instead, each source system and hosting pattern were evaluated against its current capacity baseline prior to integration into the total pricing.

While the pricing was developed with bottom-up approach using detailed analysis, the specific numbers and quantities are assumptions. Specific configuration changes are expected during implementation and performance tuning.

Major hosting component inventory summary

Service Type	Capacity / Usage Summary
AWS EC2	60 instances with 925 vCPU and 6000 GiB RAM supporting application runtime, integration, MDM, ETL, migration tooling, and secure file transfer workloads across non-production, production, and migration environments.
AWS ECS (Fargate)	32 task profiles/pods with 128 vCPU and 960 GiB RAM hosting Spring Batch document-processing workloads that support Adobe AEM and Optum FDS across non-production and production.
Kubernetes / Container Hosting	14 Kubernetes clusters based on 750 vCPU and 3000 GiB RAM to support production & nonproduction container-based hosting (migrating from Optum Private Cloud/OFE)
AWS RDS for Oracle	6 database instances with 120 vCPU and 1000 GiB RAM providing Oracle RDBMS capacity for Optum Private Cloud/OFE, MDM database workloads, including non-production single-AZ and production Multi-AZ configurations.
AWS RDS for SQL Server	12 database nodes with 250 vCPU and 2000 GiB RAM providing SQL Server database capacity for existing, Optum private Cloud / OFE, DB2 z/OS modernization workloads across Child Support, IE, and Family Assistance environments.

Service Type	Capacity / Usage Summary
AWS Workspaces	50 virtual desktops with 120 vCPU and 600 GiB RAM providing developer and migration VM access for build-server and migration activities.
Tier 0 and Shared Components	Various shared capabilities supporting backups, deployment framework, application monitoring, network, identity, logging/log consolidation, integration endpoints, and gateways.

Assumptions

Our proposed pricing is based on the following assumptions. They are organized to separate ownership, hosting architecture, migration timing, pricing, and licensing.

Hosting and operational responsibility

Area	Assumption
Cloud tenancy	Target hosting will utilize the State of West Virginia's shared AWS tenancy in the AWS US East Region, with workloads, data, and network resources operating in a segregated environment isolated from other AWS customers.
State-provided services	The State of West Virginia will provide tier 0 services, including identity management, network definition, edge protection, and security monitoring.
WV Path (Optum Managed) environment	Optum will receive and manage the dedicated application hosting environment within the shared tenancy for WV PATH.
Optum responsibilities	Optum will deploy and manage the WV PATH application hosting infrastructure and software, including deployments, releases, monitoring, and management.
Availability and recovery	Production hosting will be designed for resiliency across multiple availability zones; a second AWS region available to support disaster recovery.
Data protection and backups	The hosting design will include backup and data protection capabilities appropriate for WV PATH

Migration timeline

Timeframe	Assumption
End of Contract year 2	Ensono mainframe components and West Virginia data center-hosted components are expected to be migrated.
End of Contract year 3	Optum private cloud-hosted components are expected to be migrated.
Contract Year 4 onward	The environment is expected to move into steady-state operations.

Pricing and cost management

Cost Driver	Assumption
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AWS pricing	Estimate assumes a 20% discount from AWS published rates based on enterprise and volume pricing programs.
Cost optimization	Estimate assumes active cost management, including 3 year reserved pricing and shutdown of non-production services outside business hours.
State OIT uplift	Estimate includes a 30% State of West Virginia OIT uplift to cover tier 0 hosting and administration (based on RFP Q&A).
Growth	Estimate incorporates expected year-over-year growth of 4% (unless stated otherwise).

Software licensing

License Category	Assumption
Oracle products	Oracle product licensing costs assume deployment of Optum-owned licenses using Optum price schedules, with a 3% year-over-year maintenance cost increase.
Non-Oracle products	Retained non-Oracle software licenses are assumed to redeploy as-is from the current hosting environment to the target cloud environment, with flat cost.

Estimation details

The infrastructure estimate was developed by sizing each major hosting area separately, using the most relevant baseline for that area. Mainframe workloads were sized from estimated MIPS consumption, West Virginia data center workloads were sized from existing physical and virtual host capacity, and Optum private cloud workloads were sized from current OFE hosting inventory with targeted adjustments for cloud operating patterns.

Mainframe to Java/SQL Server on AWS Cloud

Input / Adjustment	Basis used in estimate
Baseline workload	COBOL workload estimated at approximately 500 MIPS; Natural workload estimated at approximately 200 MIPS.
CPU conversion	Applied a 3.5× CPU multiplier to account for Java runtime overhead compared to COBOL, including BigDecimal arithmetic and JVM processing.
Memory conversion	Applied a 4× memory multiplier to account for JVM heap requirements and garbage collection overhead.
Peak capacity	Added a 30% peak capacity buffer for unexpected workload spikes.
Concurrency	Applied a 1.2× concurrency factor for thread switching and runtime execution behavior.
High availability	Applied a 2× high availability factor for redundancy.
Growth reserve	Included a 25% reserve for future growth.

The resulting model was used to recommend AWS virtual machine configurations for vCPU, memory, and storage. The estimate also considers JVM warm-up latency, garbage collection memory pressure, and the potential use of Kubernetes to support horizontal scaling during a gradual migration with parallel run periods.

West Virginia data center-hosted components on AWS Cloud

West Virginia data center-hosted components were sized from the current infrastructure footprint and then adjusted for expected cloud performance, utilization targets, and autoscaling capability. The current environment includes 10 physical servers with 56 CPU cores and 1,000 GB of RAM, plus 15 virtual machines with 48 CPU cores and 523 GB of RAM.

Area	Estimation treatment
Application hosts	Applied a 0.75× CPU multiplier to reflect improved performance from newer cloud compute capacity, then sized CPU and memory to target approximately 60% utilization before autoscaling. Assumes RHEL 10 operating system for all Linux VM's.
Database hosts	Assumes AWS RDS hosts, incorporated a 30% peak capacity buffer for heavy workload spikes.
Disaster recovery hosting	Assumed application hosts are deployed but shut down when not needed, with reduced database RDS provisioning using a read-only node (approximate 25% of production node size).
Oracle licenses	Assumed purchase of replacement WV Oracle licenses with licenses under the Optum contract; using Optum contract pricing that reflects approximately 75% savings compared to West Virginia contract costs.

Optum private cloud / OFE components on AWS Cloud

Optum private cloud components were generally carried forward on a 1:1 basis from the current OFE hosting footprint. This includes Kubernetes containers, virtual machines, Oracle databases, and SQL Server databases currently deployed across two Optum data centers. Adjustments were made only where the change to cloud hosting enables a different operating model.

Area	Estimation treatment
Most hosting components	Carried forward 1:1 from the current Optum private cloud environment.
Oracle Database hosts	Reduced database core counts from 118 cores to 106 cores; deploy Optum Oracle licenses.
Disaster recovery application hosting	Assumed virtual machines and containers can be deployed but shut down when not actively needed.
Disaster recovery database hosting	Assumed database nodes run at reduced capacity, approximately 25% of primary production capacity.

Appendix

The appendix tables below summarize the service-distribution assumptions made in our Cost Proposal.

AWS service-level compute distribution:

Ensono and WV hosted workload.

Ensono and WV data center hosted capacity migration to AWS: Basis of estimation for cloud capacity

Service	Env	Category	Workload	Basis of estimation
Compute Capacity Group: 2 vCPU / 4 GiB				
AWS EC2	Non-PRD/PRD	Integration	Secure File Transfer (Tibco MFT)	Requirement: 150MB for install, 2GB (min) to 8GB RAM, 2 to 4 CPU AWS shape: 1 instance, c6g.large, 2 vCPU / 4 GiB
AWS Workspaces	DEV	CI/CD	Build server access (virtual desktop)	Requirement: 12 users AWS shape: 12 WorkSpaces, 2 vCPU / 4 GiB per desktop profile
AWS Workspaces	MIGRATION	Migration	VM access	Requirement: 12 users AWS shape: 12 Workspaces, 2 vCPU / 4 GiB per desktop profile
Compute Capacity Group: 2 vCPU / 8 GiB				
AWS EC2	DEV	CI/CD	Build server (Ant scripts)	Requirement: Application host sizing requirement AWS shape: 2 instances, t3.large, 2 vCPU / 8 GiB
Compute Capacity Group: 2 vCPU / 32 GiB				
AWS EC2	DEV/SIT/UAT/TRN	IE Agent Portal	Oracle WebLogic + FA Agent Portal App + Corticon	Requirement: 3 * 2 CPU, 32 GB RAM AWS shape: 1 instance, x8g.large, 2 vCPU / 32 GiB
AWS EC2	PRD	IE Agent Portal	Oracle WebLogic + IA Agent Portal App + Corticon	Requirement: 2 * 2 CPU, 32 GB RAM AWS shape: 2 instances, x8g.large, 2 vCPU / 32 GiB
Compute Capacity Group: 4 vCPU / 16 GiB				
AWS RDS for SQL Server	DEV/SIT/UAT/TRN	Child Support	DB2 z/OS --> SQL Server	Requirement: Application host sizing requirement AWS shape: 1 node, db.m7i.xlarge, 4 vCPU / 16 GiB
AWS RDS for SQL Server	DEV/SIT/UAT/TRN	IE & Family Assistance	DB2 z/OS --> SQL Server	Requirement: Application host sizing requirement AWS shape: 1 node, db.m7i.xlarge, 4 vCPU / 16 GiB
Compute Capacity Group: 4 vCPU / 30 GiB				

Service	Env	Category	Workload	Basis of estimation
AWS ECS (Fargate)	DEV/SIT/UAT/TRN	Document Processing	Spring Batch (to support Adobe AEM, Optum FDS)	Requirement: 3 * 2 CPU, 32 GB RAM AWS shape: 30 pods, 4 vCPU / 30 GiB per task profile
AWS ECS (Fargate)	PRD	Document Processing	Spring Batch (to support Adobe AEM, Optum FDS)	Requirement: 2 * 4 CPU, 32 GB RAM AWS shape: 2 pods, 4 vCPU / 30 GiB per task profile
Compute Capacity Group: 4 vCPU / 32 GiB				
AWS RDS for Oracle	DEV/SIT/UAT/TRN	Database (for MDM)	Oracle RDBMS	Requirement: 5 * 2 CPU, 64 GB RAM AWS shape: 1 instance, db.r7i.xlarge, 4 vCPU / 32 GiB, Single-AZ
Compute Capacity Group: 6 vCPU / 32 GiB				
AWS RDS for SQL Server	PRD	IE & Family Assistance	DB2 z/OS --> SQL Server	Requirement: Application host sizing requirement AWS shape: 2 nodes, db.m6i.2xlarge, 6 vCPU / 32 GiB, Multi-AZ
Compute Capacity Group: 8 vCPU / 32 GiB				
AWS EC2	DEV/SIT/UAT/TRN	Child Support	Natural runtimes --> Java	Requirement: MIPS-to-vCPU conversion with JVM, integration, HA, and peak-load multipliers AWS shape: 1 instance, m6i.2xlarge, 8 vCPU / 32 GiB
AWS EC2	DEV/SIT/UAT/TRN	ESB	Oracle SOA	Requirement: 3 * 2 CPU, 16 GB RAM AWS shape: 1 instance, m6i.2xlarge, 8 vCPU / 32 GiB
AWS EC2	DEV/SIT/UAT/TRN	IE & Family Assistance	COBOL --> Java	Requirement: MIPS-to-vCPU conversion with JVM, integration, HA, and peak-load multipliers AWS shape: 1 instance, m6i.2xlarge, 8 vCPU / 32 GiB
AWS EC2	DEV/SIT/UAT/TRN	MDM + Address Verification	Informatica MDM + Address Doctor	Requirement: 4 * 2 CPU, 32 GB RAM AWS shape: 1 instance, m6i.2xlarge, 8 vCPU / 32 GiB
AWS EC2	PRD	Child Support	Natural runtimes --> Java	Requirement: MIPS-to-vCPU conversion with JVM, integration, HA, and peak-load multipliers AWS shape: 2 instances, m6i.2xlarge, 8 vCPU / 32 GiB

Service	Env	Category	Workload	Basis of estimation
AWS EC2	UAT	ETL	Informatica PowerCenter (to load into MDM Oracle)	Requirement: 4 CPU, 32 GB RAM AWS shape: 1 instance, m6i.2xlarge, 8 vCPU / 32 GiB
AWS RDS for SQL Server	PRD	Child Support	DB2 z/OS --> SQL Server	Requirement: Application host sizing requirement AWS shape: 2 nodes, db.m6i.2xlarge, 8 vCPU / 32 GiB, Multi-AZ
Compute Capacity Group: 8 vCPU / 64 GiB				
AWS EC2	PRD	ESB	Oracle SOA	Requirement: 2 * 2 CPU, 16 GB RAM AWS shape: 3 instances, r6i.2xlarge, 8 vCPU / 64 GiB
AWS RDS for Oracle	PRD	Database (for MDM)	Oracle RDBMS	Requirement: 2 * 4 CPU, 64 GB RAM AWS shape: 2 instances, db.r7i.2xlarge, 8 vCPU / 64 GiB, Multi-AZ
Compute Capacity Group: 16 vCPU / 32 GiB				
AWS EC2	PRD	ETL	Informatica PowerCenter (to load into MDM Oracle)	Requirement: 8 CPU, 64 GB RAM AWS shape: 3 instances, m6i.4xlarge, 16 vCPU / 32 GiB
Compute Capacity Group: 16 vCPU / 64 GiB				
AWS EC2	PRD	IE & Family Assistance	COBOL --> Java	Requirement: MIPS-to-vCPU conversion with JVM, integration, HA, and peak-load multipliers AWS shape: 2 instances, m6i.4xlarge, 16 vCPU / 64 GiB
AWS EC2	PRD	MDM + Address Verification	Informatica MDM + Address Doctor	Requirement: 2 * 4 CPU, 64 GB RAM AWS shape: 3 instances, m6i.4xlarge, 16 vCPU / 64 GiB
Compute Capacity Group: 32 vCPU / 256 GiB				
AWS EC2	MIGRATION	Migration	IBM Migration Tool	Requirement: -Instance: r7iz.8xlarge -Availability zone: us-east-1a - Architecture: AMD64 -Total memory: 256GB -Network: 12.5... AWS shape: r7iz.8xlarge, 32 vCPU / 256 GiB

Optum Private Cloud compute distribution

Optum Private Cloud Workload migration to AWS: Basis of estimation for cloud capacity

Service	Disposition	Target platform	Scope	Basis of estimation
Compute Distribution Group: Serverless / Scheduler / Messaging				
RabbitMQ	Re-Platform (with Compliance fixes)	AWS SQS,SNS, Lambda	9 Environments (CW, CS, CC)	Requirement: 9 Environments (CW, CS, CC)
Tivoli Workload Scheduler (TWS)	Modernize/Migration	AWS Event Bridge + AWS Batch + AWS Step Function + AWS SNS + AWS SQS	CW, Client Portal, CS, Reporting	x
Compute Distribution Group: Container / Kubernetes				
Anthos Container Platform(HC C K8)	Modernize	AWS EKS	All current Dockerized workloads.	Based on existing container hosting for production and non-production
DR -AKS	Modernize	Terraform -Create a new EKS in another Region on Demand using Terraform...	All current Dockerized workloads.	Sized to match production, systems in stopped state in normal conditions
Compute Distribution Group: Virtual Machine Hosted				
Batch Jobs	Re-Platform (with Compliance fixes)	AWS EC2	CW, CS, Felxi, Client Portal	# of Jobs: CW : 110 IE: 1 (flexi) CC : 7 CS : 2 Client Portal Basis: 3 Env, 4 hours per batch job
Cincom Eloquence	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant) (Alternate solution is to use Adobe Cloud service) Conver...	IE Portals, CS, CW	# of environments CW : 9 IE : 9 CS : 9 Common Portals :2
DR -VM	Modernize	AWS Snapshot Backups to deploy on demand with DR event	Optum private cloud VM hosting	Adhering to RTO/RPO
Docker Server	Modernize	AWS EC2, Docker CLI and ECR	IE Portals, CS, CW	No of environment CW : 9 IE : 9 CS : 9 Common Portals :2 We need 4 EC2 bootstrapped Basis: One ECR for cloud (Prod) and (Non prod)

Service	Disposition	Target platform	Scope	Basis of estimation
Flexi Financials	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	IE Portals, CS, CW	No of environment 8 combined
IBM Cognos	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	Production & Non-Production	No of environments: 5 combined
IBM ODM	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	IE Portals, CP	No of environments: 6 non-prod, 1 prod
Informatica PowerCenter	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	ETL reports: # of environments:	ETL reports: # of environments:
MuleSoft MuleESB	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	IE Portals, CS, CW	No of environment CW : 9 IE : 9 CS : 9 Common Portals :2
OEM	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	CW	No of environment CW : 9 Oracle Enterprise solution can be used. Oracle RAC is not supported
RabbitMQ	Re-Platform (with Compliance fixes)	Re-platform to AWS VM (Compliant)	Assuming 10 RMQ	Requirement: Assuming 10 RMQ Create VMs Configure RMQ. Validate Configs Validate Envs End to End testing
Compute Distribution Group: Managed Database				
DB Migration -SQL + Oracle	Re-Platform (with Compliance fixes)	AWS RDS	Capacity in Solution Outline.	Environment and workload scope not explicitly quantified in the sheet Basis: Assuming Oracle will be supported by AWS RDS.
MS SQL Server	Re-Platform (with Compliance fixes)	Move to AWS RDS SQL Database OPTION -Move to SQLServer MI	IE Portals, common portals (shared)	No of environment IE : 9 Common Portals :2
MS SSIS	Re-Platform (with Compliance fixes)	Move to SSIS Catalog (SSISDB) on MS SQL Database	NA	Requirement: NA Basis: Migration effort captured at service level in the source sheet

Service	Disposition	Target platform	Scope	Basis of estimation
Compute Distribution Group: Mixed VM + Managed Database				
Flexi Financials - Install/Config	Modernize	(RDS:SQLSERVER + VM) , Windows Desktop -Jump Server (RDP service)	IE Portals, CS, CW	No of environment CW : 9 IE : 9 CS : 9 Basis: Desktop application and Its installed Singe sign on state machine. Flexi is available on AWS (RDS:SQLSERVER + VM)
Compute Distribution Group: Desktop / Bastion Access				
Jump Server	Modernize	AWS Bastion	All OFE IDs:	Based on current Optum access patterns
Horizon SAW	MIGRATION	AWS Workspaces	VM access for Optum technical resources	Requirement: 38 users AWS shape: 38 Workspaces, 2 vCPU / 4 GiB per desktop profile
Compute Distribution Group: Shared Platform Services				
Backup -VM Disks, VM Snapshots, databases	Modernize	For Non Prod - weekly backups, for Production it will be Weekly, Monthly...	All production and Non-production	Existing Optum data protection scope and practices
Dynatrace	Modernize	AWS Native Monitoring using AWS CloudWatch, Synthetic, APM.	Tier -0 Services will provide equivalent functionality	Requirement: Tier -0 Services will provide equivalent functionality to current observability fabric
ECG	Modernize	AWS Transfer Family	Existing Optum SFTP services	Existing Optum ECG Jobs and transfer scope will be incorporated into Tier 0 AWS transfer family services
Grafana	Modernize	AWS CloudWatch and Athena	Use Grafana Managed service. Assuming 10 custom reports to be redeveloped	Requirement: Use Grafana Managed service. Assuming 10 custom reports to be redeveloped
Hashi Corp Vault/CyberArk	Modernize	AWS Secrets Manager	600 keys in vault	Requirement: 600 keys in vault, including non-production and production
Load Balancer	Modernize	AWS Load Balancer, CloudFront, API Gateway , Route53, VPN/IPSEC, Firewall	IE Portals, Common Portals (shared)	No of environments: IE portals: 9, common(shared) 2

Service	Disposition	Target platform	Scope	Basis of estimation
MPLS	Re-Platform (with Compliance fixes)	AWS Direct Connect	OFE to Data Center connectivity QA Effort should account this..	Requirement: OFE to AWS connectivity QA Effort and temp connections Ensono to AWS
OFE ID/MSID	Modernize	OFE ID/MSID (or equ)	All developers with OFE id and MS id need to create cloud borne identity	Requirement: All developers with OFE id and MS id need to create cloud borne identity. Assumption -applicable for only Optum employees and contractors
Optum GovID for external users(Client Portal, CS, CW)	No change/Lift & Shift	Optum GovID for external users(Client Portal, CS, CW)	CS: 2000 IE CC: IE FA: CW: CP: BAS: Provider AP: Provider CP: Reports: Flexi:	Requirement: CS: 2000 IE CC: IE FA: CW: CP: BAS: Provider AP: Provider CP: Reports: Flexi:
Splunk	Modernize	AWS CloudWatch and OpenSearch	Application code change is needed. Log back API will change. Sidecar pattern for movement log movement	Requirement: Application code change is needed. Log back API will change. Sidecar pattern for movement. Logback/Log4J is used in each container pod
Venafi	Modernize/Integration	AWS Certificate Manager	Existing certs equivalent for new hosting	Counts dependent on final deployment / environment configuration
Compute Distribution Group: Other Hosting Pattern				
Backup -DB	Modernize	RDS snapshots	Oracle and SQL Server Databases	Requirement: Based on contract, current practices and Optum best practices Currently (incremental every 30 min, daily 24 hour period and weekly each Saturday
DR-DB	Modernize	AWS RDS managed replication to DR instance	Oracle and SQL Server Databases	Aligned to RTO/RPO requirements
NAS Storage	Modernize	EFS	wvie_batch_prod - 25TB wvie_dc_prod - 450GB wvie-batch_np -5TB wvie_dc_dev -1.5 TB	Requirement: wvie_batch_prod -25TB wvie_dc_prod -450GB wvie-batch_np -5TB wvie_dc_dev -1.5 TB Geo replicated
SiteScope / Zabbix	Modernize	Monitoring the server.	Tier -0 Services will provide equivalent functionality	Requirement: Tier -0 Services will provide equivalent functionality





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