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December 13, 2016

State of West Virginia
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RE: Integrated Eligibility Solution (IES) - CRFP 0511 HHR1700000002

Dear Mr. Atkins:

Optum¹ is pleased to submit this Cost Proposal for West Virginia's Integrated Eligibility Solution (IES) RFP.

Our solution is truly modular, modern and outcomes driven using partners and products that are known and used by DHHR and the State of West Virginia. Our pricing is based solely on the direct costs to deliver and maintain the modules and integrate the individual COTS components of the system. Our costs to develop the core products of the system are being amortized internally over years to be as aggressive as possible.

We have taken an approach to reuse and COTS that is very different from a traditional transfer approach that requires customization of previously delivered monolithic systems that are glued together for use in a new state. This modularity achieves a much lower total cost of ownership and reduced Operations and Maintenance costs through loosely coupled integration using a common integration framework. This approach requires an initial investment that can be seen and recognized for decades to come.

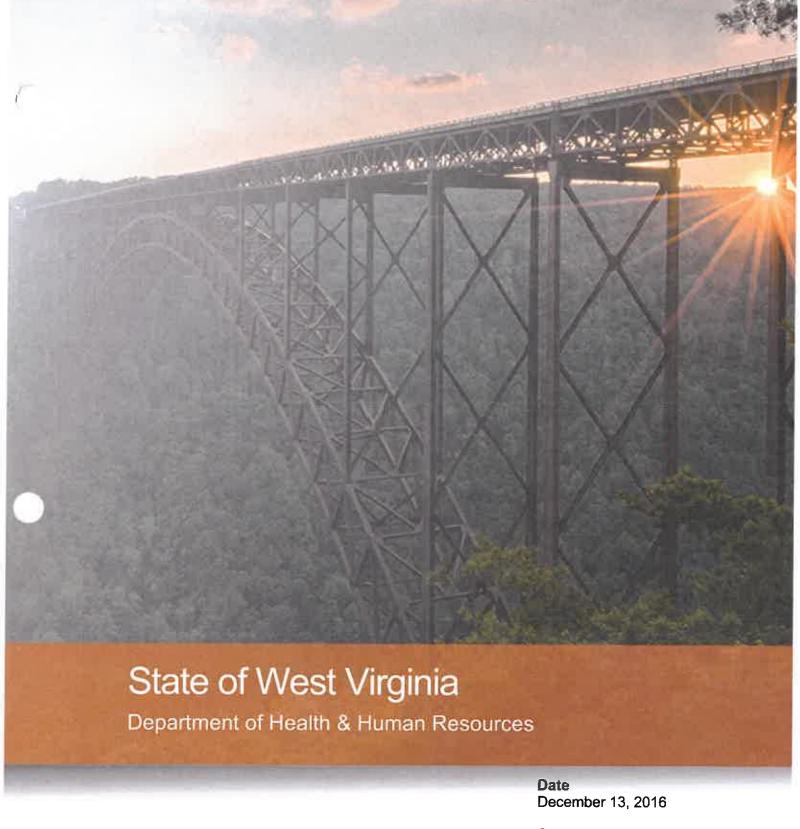
As the current RAPIDS M&O vendor to the State, Optum is pleased to have the opportunity to invest in West Virginians on the RAPIDS and other projects. Recently, we invested more than \$1.5 million to lease and upgrade office space in Charleston and we will expand this space if awarded this contract. UnitedHealth Group's annual investment in West Virginia is over \$33 million, and United Health Group Foundation was proud to provide \$500,000 to help Launch Homes in West Virginia rebuild homes and communities affected by flooding.

Best regards,

T. David Smith

Client Relationship Executive

¹ The legal name of the bidder is OptumInsight, Inc. and has adopted the brand "Optum" as part of a leading health services business.



Integrated Eligibility Solution (IES)

Cost Proposal
Solicitation No.: CRFP 0511 HHR1700000002

Contact

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1. Cost Proposal Introduction

Optum is pleased to submit this Cost Proposal for West Virginia's Integrated Eligibility Solution (IES) RFP. Our solution is truly modular, modern and outcomes driven using partners and products that are known and used by DHHR and the State of West Virginia. We have taken an approach to reuse and COTS that is very different from a traditional transfer approach that requires customization of previously delivered monolithic systems that are glued together for use in a new state. Over time, this modularity achieves a much lower total cost of ownership and reduced Operations and Maintenance costs through loosely coupled integration using a common integration framework. This approach requires an initial investment that can be seen and recognized for decades to come.

Optum developed our cost estimate for the WV IES by following a bottoms-up approach against the 2,759 requirements listed in the RFP. Our first filter was to match the requirements against our existing IE product functionality, and solutions from our partner organizations. Several hundred [485] functional requirements are considered native to Optum's IE solution.

The remaining requirements requiring development and configuration estimates were individually sized based on our experience developing large scale health and human services systems. Industry standards were applied to arrive at the full DDI cost that spans all phases of the software development lifecycle. Costs were reviewed and refined based on feedback from subject matter experts as well as our existing knowledge of the size and complexity of current systems supporting West Virginia health and human services.

Similarly, maintenance and operations (M&O) costs were modeled and estimated based on Optum experience and expertise managing large scale systems. We have many years' of actual M&O activity data, and we used that data to model WV IES work effort. This model is based on similar system profiles and implementations and takes into account cross-module efficiencies. These costs were also vetted extensively to confirm that Optum is keeping costs as low as possible while still ensuring we are providing a fully ITIL-compliant operation.

Infrastructure costs were based on models of the computing power needed to host the WV IES, and take advantage of the economies of scale Optum can provide through our own data centers that currently support thousands of customer applications.

However Optum believes there are opportunities to partner with the State to further reduce the WV IES cost structure if the Department of Administration and DHHR are interested in exploring cost saving options. The areas we believe are worth exploring that would not deviate from the scope of our proposed functionality.

Opportunity may exist to apply more standard solutions that meet federal guidelines but do not necessarily re-apply all of West Virginia's legacy business logic. Examples of potential simplification include:

- Eligibility rules: Several hundred [771] requirements make specific reference to implementation "according to WV business rules"
- Notices: There are 1,166 State-specific notices and forms referenced in the RFP
- Alerts: There are 646 State-specific alerts referenced in the RFP
- Reports: There are more than 150 individual requirements that mention reporting, and 838 state-specific reports referenced in the RFP.



As another consideration, Optum's partner CGI has implemented a fully federally-certified child welfare solution that could be implemented more economically if it were deployed more "as-is" versus being extensively modified for West Virginia.

- Extensiveness of Technology Upgrade: For example, if the State were amenable, costs
 may be better contained if an existing mainframe system had a complete overhaul of its user
 experience while continuing to use its legacy back-end process, and enhance that back-end
 over time.
- Work Arrangement: Costs could be reduced by allowing some DDI development to be done using off-shore resources as long as that activity remains compliant with CMS guidelines.
- DDI versus Enhancement Timeline: It was unclear whether the state was open to leveraging enhancement budgets in later years to implement any requirements not deemed critical in initial phases, or to grow requirement solutions over time.

Statements about State Procurement Law

Section 148-1-7 of the West Virginia Code of State Rules, Subsection 7.11.13 allows for the negotiation of a lower price with the highest ranked bidder when a best value procurement approach is used, and there is more than one bidder. Optum is open to further negotiation if West Virginia determines it is in your best interest.

December 13, 2016



2. Costing Assumptions

In the following table, we document the assumptions we used while developing our cost proposal.

| Category | Cost Assumption |
|----------|---|
| | Our solution meets the following DHHR mandatory requirements related to modules: |
| General | Five mandatory modules are listed and must be proposed as part of the Vendor's solution. The proposing Vendor, as defined in RFP Section 3, Subsection 2.9, must not own the majority (more than half) of these five mandatory modules. No Vendor partner or partners can own/provide more than two of the mandatory modules. |
| | Even if more than the mandatory modules are proposed, no Vendor or Vendor partner(s) can own the majority of the mandatory modules. |
| General | Our pricing includes the use of onshore personnel in support of this contract as required based on DHHR's answers to vendor questions provided in RFP Addendum 2. However, the State could experience cost savings if off-shore resources are used, as permitted by federal regulations for development and testing of data that is not regulated by IRS 1075. |
| General | Optum DDI pricing assumes payment based on the milestone payments set forth in the RFP, and any additional payment milestones as mutually agreed to between the parties. |
| General | Only Key Staff and Support Staff are expected to be onsite 100% of the time. Other resources will travel to WV at Optum's discretion. |
| General | Any Tools and Accelerators can be deployed and used during the transformation of the application. Any customization to these Tools and Accelerators by Optum or its subcontractors will be at our own cost, and will be completed to support the automated transformation of programs written in the Natural programming language. The State of West Virginia shall not claim any ownership rights to these tools and accelerators. |
| General | All functional enhancement requests will be treated as additional scope and will be handled via a mutually agreed to Change Management Procedure. |
| General | All sizing and user counts are based on information from the RFP and the subsequent answers to vendor questions provided by DHHS in RFP Addendum 2. |
| General | We assumed that the State's current document repository (Hyland Onbase) will be used for document storage and retrieval. |
| General | We assumed that the State's mailroom will capture and scan all paper documents in the same manner they do today in support of the legacy solution. |
| DDI | The DDI schedule assumed a start date of March 1, 2017. Any deviation from this start date may result in changes to the milestone and delivery dates shown in the proposal and in the draft detailed project schedule. |
| DDI | Opturn will meet the 2,759 requirements listed in the RFP. |
| DDI | The DDI schedule assumes a pilot for most of the releases and assumes that the State resources for the selected pilot counties will be able to participate and provide feedback during the pilot period. |
| DDI | Sample Natural programs of the OSCAR system shall be supplied to Optum during customization to verify the effectiveness of transformation and further fine-tuning to derive maximum efficiency of automation |
| DDI | The following assumptions are made on the scope and size of the current OSCAR system for estimation purpose: |
| | The domain model and DB schema for OSCAR shall not undergo any changes. |



| Category | Cost Assumption | |
|-----------|---|--|
| | Lines of code corresponding to online transactions, persistence and user interface: 3.5 Million | |
| | Lines of code corresponding to batch programs: 1 Million | |
| 1 | Number of screens in the overall system: 750 | |
| | Number of tables in the database system: 500 | |
| | Number of batch jobs: 300 | |
| | Number of unique interfaces with surrounding systems: 20 | |
| DDI | Entrance and exit criteria (to be mutually agreed upon) will be the basis for determining the commencement/conclusion for each DDI phase. For example, the entry point for the pilots will assume a certain level of acceptable defects (e.g., zero Severity 1 and 2 defects). | |
| Insurance | Optum agrees to furnish proof of insurance, but should State request additional insurance beyond what is currently defined in the RFP, Optum will have the opportunity to review such requirements to determine if changes to Optum's price are necessary. | |
| | Optum will take over existing computing costs, as necessary, through modernization. | |
| | We assumed the current West Virginia mainframe chargeback for RAPIDS is: | |
| M&O | \$70k/month for Mainframe Batch Cost | |
| mao | \$143k/month for Mainframe Online Cost | |
| | We used information provided in the RFP and the Procurement Library to estimate mainframe computing costs for OSCAR and RAPIDS. | |
| M&O | Optum will take over the existing software licenses and running in parallel, as necessary, until the modernization is complete. | |
| M&O | We will pay the ongoing Software AG licensing fee of \$780k until the new Child Support system goes live. | |
| M&O | The Optum Data File Management (DFM) solution was designed with five environments to support the WV IES. | |
| M&O | Based on materials provided in the procurement library, West Virginia has a benefit population of 750,000. We assumed that 300,000 documents will require e-signatures. | |
| M&O | The M&O licensing cost is for six M&O environments as listed in the RFP. These include: Development and Unit Testing, System Integration Testing, User Acceptance Testing, End-user Training, Disaster Recovery, and Production. | |
| M&O | Current RAPIDS M&O is governed by the terms and conditions of the existing contract, unless mutually agreed by the parties. | |
| Reporting | Based on RFP Requirement GT0222 ("The solution should allow, initially, up to 25 State-authorized users to create ad hoc reports."), we have included Cognos license costs for 25 users. | |
| Reporting | Based on the "DOC064_Alerts, Reports, Letters, Forms, Notices, and Interfaces Inventory" worksheet provided in the procurement library we have estimated the number of reports that will need to be converted or developed for use with the new data mart is 787. | |
| | We are assuming we will use the existing Informatica MDM solution. | |
| Reporting | Optum has performed a thorough review all DHHR licensing including current Informatica licensing from the procurement library (DOC066-License Inventory). Optum will take over the existing licenses and running in parallel, as necessary, until the modernization is complete. In addition, Optum will fully supporting the following incremental capabilities: | |
| | Test Data Manager: Test Data Manager increases the efficiency of test data production across multiple concurrent iterations. | |



| Software Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Pricing for licensing is based on quantities provided in the license inventory list in the procurement library. Additional users required to accommodate growth will be subject to Sections 5.25 and 5.51 of the RFP. Optum assumes that the license access rights provided by Optum to the State for software provided under a software-as-a-service model will be used by the State solely in conjunction with Optum-provided services and applications, and not used independent of such services or applications. | Category | Cost Assumption |
|--|-----------------|--|
| Metadata Exchange links for Cognos and Oracle: The Enterprise Metadata Management unifies the database design, business intelligence and data transformation processes. Provider Regarding multiple language support, we assumed that the primary languages required to support the provider community are English and Spanish. We assumed that the State's sister agency will perform required background checks and finger printing in support of credentialing and licensure. This is the same process that is current followed under the MMIS contract. Technical Support Contact Center Technical Support Centact Center Technical Support Centact Center Support Centact Center Technical Support Centact Center Support Centact Center Technical Support Centact Center Support Centact Support Centact Center Support Centact Support Centact Center Support Centact Support Cen | | validation is included with Premium. Data validation validates the correctness of large data conversion and we strongly recommended it. It allows for more discoveries and therefore lowers the risk of undiscovered data conversion errors. Adding MDM for cases/families as required for consolidating multiple systems: Optum has switched from counting lives from unconsolidated basis to a consolidate lives and cases basis to validate compliance with the life count across the three major systems |
| support the provider community are English and Spanish. We assumed that the State's sister agency will perform required background checks and finger printing in support of credentialing and licensure. This is the same process that is current followed under the MMIS contract. Technical Support Contact Center Technical Support Contact Center Call volume estimates are based on information provided in the RFP and in the Procurement Library. Any significant increase in the call volumes may trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Call center estimates from provider enrollment specialists and state case workers were based on the 50-55 existing state offices where state employees are performing IE&E functions. If additional state offices are created or increase in state employees performing IE&E functions result in a significant increase in call volumes this could trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Where the State's perpetual licenses are assumed to be non-transferable, Optum has provided pricing for new licenses as needed to continue operation of the existing system until functionality is replaced with the new system. If this assumption is incorrect, licensing costs can be reduced. Software Our pricing does not contemplate licenses or support beyond the end of the contract term, nor transferring of license back to State. Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Outpricing assumes that the license access rights provided by Optum to the State for software provided under a software-as-as-evice mode | | Metadata Exchange links for Cognos and Oracle: The Enterprise Metadata Management unifies the database design, business intelligence and data transformation |
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| Support Contact Center Technical Support Contact Center Call volume estimates are based on information provided in the RFP and in the Procurement Library. Any significant increase in the call volumes may trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Call center estimates from provider enrollment specialists and state case workers were based on the 50-55 existing state offices where state employees are performing IE&E functions. If additional state offices are created or increase in state employees performing IE&E functions result in a significant increase in call volumes this could trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Where the State's perpetual licenses are assumed to be non-transferable, Optum has provided pricing for new licenses as needed to continue operation of the existing system until that functionality is replaced with the new system. If this assumption is incorrect, licensing costs can be reduced. Software Optum will purchase new licenses as current State licenses expire, as needed to continue operation of the existing system. Our pricing does not contemplate licenses or support beyond the end of the contract term, nor transferring of license back to State. Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Pricing for licensing is based on quantities provided in the license inventory list in the procurement library. Additional users required to accommodate growth will be subject to Sections 5.25 and 5.51 of the RFP. Optum assumes that the license access rights provided by Optum to the State for | Provider | printing in support of credentialing and licensure. This is the same process that is current |
| Support Contact Center Library. Any significant increase in the call volumes may trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Call center estimates from provider enrollment specialists and state case workers were based on the 50-55 existing state offices where state employees performing IE&E functions. If additional state offices are created or increase in state employees performing IE&E functions result in a significant increase in call volumes this could trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Where the State's perpetual licenses are assumed to be non-transferable, Optum has provided pricing for new licenses as needed to continue operation of the existing system until that functionality is replaced with the new system. If this assumption is incorrect, licensing costs can be reduced. Optum will purchase new licenses as current State licenses expire, as needed to continue operation of the existing system until functionality is replaced with the new system. Our pricing does not contemplate licenses or support beyond the end of the contract term, nor transferring of license back to State. Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Pricing for licensing is based on quantities provided in the license inventory list in the procurement library. Additional users required to accommodate growth will be subject to Sections 5.25 and 5.51 of the RFP. Optum assumes that the license access rights provided by Optum to the State for software provided under a software-as-a-service model will be used by the State solely | Support Contact | We assumed that the AVRS/IVR will route calls to the existing State AVRS via the existing toll-free number used by the State. |
| Technical Support Contact Center on the 50-55 existing state offices where state employees are performing IE&E functions. If additional state offices are created or increase in state employees performing IE&E functions result in a significant increase in call volumes this could trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain established service level agreements. Where the State's perpetual licenses are assumed to be non-transferable, Optum has provided pricing for new licenses as needed to continue operation of the existing system until that functionality is replaced with the new system. If this assumption is incorrect, licensing costs can be reduced. Software Optum will purchase new licenses as current State licenses expire, as needed to continue operation of the existing system until functionality is replaced with the new system. Our pricing does not contemplate licenses or support beyond the end of the contract term, nor transferring of license back to State. Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Pricing for licensing is based on quantities provided in the license inventory list in the procurement library. Additional users required to accommodate growth will be subject to Sections 5.25 and 5.51 of the RFP. Optum assumes that the license access rights provided by Optum to the State for software provided under a software-as-a-service model will be used by the State solely in conjunction with Optum-provided services and applications, and not used independent of such services or applications. | Support Contact | Library. Any significant increase in the call volumes may trigger the need to engage the Change Management Process if additional staffing and/or technology expansion is required to maintain |
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| transferring of license back to State. Our pricing assumes that software whose functionality must be accessed by the State, licensing shall be for external use. For software that is simply part of Optum's set of tools provided to deliver RFP-required services, Optum will obtain licenses for our internal use but in support of the State. Pricing for licensing is based on quantities provided in the license inventory list in the procurement library. Additional users required to accommodate growth will be subject to Sections 5.25 and 5.51 of the RFP. Optum assumes that the license access rights provided by Optum to the State for software provided under a software-as-a-service model will be used by the State solely in conjunction with Optum-provided services and applications, and not used independent of such services or applications. | Software | Optum will purchase new licenses as current State licenses expire, as needed to continue operation of the existing system until functionality is replaced with the new system. |
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| Software provided under a software-as-a-service model will be used by the State solely in conjunction with Optum-provided services and applications, and not used independent of such services or applications. | Software | procurement library. Additional users required to accommodate growth will be subject to |
| Software Unless otherwise specified, we do not certify the integration platform to be in audit compliance | Software | provided under a software-as-a-service model will be used by the State solely in conjunction with Optum-provided services and applications, and not used independent of such services or |
| | Software | Unless otherwise specified, we do not certify the integration platform to be in audit compliance |



| Category | Cost Assumption |
|--|--|
| | with any specific audit or Governance framework, such as HIPAA, IRS pub 1075, PCI DSS, MARS-E, NIST 800-53, SOX, etc. The solution does not include labor costs for Security assessments and remediation that may be enforced by Optum and West Virginia Compliance teams based on the solution, hosting or other agreements. |
| Software | The Complexity of any given integration is determined based upon information available in the RFP procurement library. Further development of the design and due diligence on the existing infrastructure may result in changes in the estimated complexity. |
| Software | Optum assumes that existing external integrations present in the Oracle SOA ESB will be reused as part of the WV IES. |
| Technical /Engineering/Inf rastructure | Per Optum standard practices, we will be using Production/DR, Stage, User Acceptance Testing/Training, Systems Integrated Test and Development environments to meet the environment usage patterns described in the RFP. |
| Technical /Engineering/Inf rastructure | Disaster recovery SLAs will be met using server redundancy and industry standard data replication strategies across our existing primary and secondary data centers. |
| Technical /Engineering/Inf rastructure | High availability SLAs will be met using an N+1 server redundancy implementation and industry standard load balancing practices in combination with data replication strategies. |
| Technical /Engineering/Inf rastructure | Our initial application capacity planning is based on user and licensing information provided in the RFP and assumes user patterns based on those values. Capacity growth will be managed using Optum Capacity Management practices. Capacity monitoring and predictive planning, in combination with a modular approach to both hardware and software capabilities allows for flexible scalability options. |
| Technical /Engineering/Inf rastructure | Optum can make no claims nor retain responsibility for public Internet performance or failures of individual users' private ISP performance or failures. Optum will make every effort to design solutions with normal Internet functioning in mind. |
| Training | Operations costs include version control and maintenance of training documentation. |



3. Attachment C: Cost Sheet

Table 12: Design, Development & Implementation (DDI) Cost

| Design, Development & Implementation (DDI) | | |
|---|---------------|--|
| ltem 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | Total | |
| Total DDI Costs | \$188,192,000 | |
| (See Appendix II: Deliverables, Milestones, and Payments) | | |

Table 13: Maintenance and Operations (M&O) Cost

| Maintenance and Operations (M&O) | | |
|--|--------------|-------------------------------------|
| Period | Monthly Cost | Total (Monthly Cost x 12 Months) |
| Year 1* | \$ 0.00 | \$ 0.00 |
| Year 2 | \$ 1,747,333 | \$ 20,968,000 |
| Year 3 | \$ 2,327,000 | \$ 27,924,000 |
| Year 4 | \$ 2,278,667 | \$ 27,344,000 |
| Year 5 | \$ 2,197,333 | \$ 26,368,000 |
| Year 6 | \$ 2,103,500 | \$ 25,242,000 |
| Year 7 | \$ 2,043,833 | \$ 24,526,000 |
| Year 8 | \$ 1,971,333 | \$ 23,656,000 |
| Year 9 | \$ 1,915,583 | \$ 22,987,000 |
| Year 10 | \$ 1,867,083 | \$ 22,405,000 |
| All inclusive Maintenance and Operations Cost | GRAND TOTAL | \$ 221,420,000 |

Table 14: Modifications and Enhancements Cost

| Modifications and Enhancements | | | |
|--------------------------------|-------------|--------|--|
| Period | Hourly Rate | Hours | Total (Hourly Rate x 60,000 Hours) |
| Year 1* | \$ 0.00 | 0 | \$0.00 |
| Year 2 | \$ 114 | 60,000 | \$ 6,840,000 |
| Year 3 | \$ 116 | 60,000 | \$ 6,960,000 |
| Year 4 | \$ 118 | 60,000 | \$ 7,080,000 |

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| Modifications and Enhancements | | | |
|--------------------------------|------------------|-------------|--|
| Period | Hourly Rate | Hours | Total (Hourly Rate x 60,000 Hours) |
| Year 5 | \$ 121 | 60,000 | \$ 7,260,000 |
| Year 6 | \$ 124 | 60,000 | \$ 7,440,000 |
| Year 7 | \$ 128 | 60,000 | \$ 7,680,000 |
| Year 8 | \$ 132 | 60,000 | \$ 7,920,000 |
| Year 9 | \$ 136 | 60,000 | \$ 8,160,000 |
| Year 10 | \$ 140 | 60,000 | \$ 8,400,000 |
| All inclusive Maintenanc | e and Operations | GRAND TOTAL | \$ 67,740,000 |

Table 15: All-Inclusive Total Cost

| All-Inclusive Total Cost | | |
|--|----------------|--|
| Service | Cost 6 | |
| Total DDI Costs (Table 12 Total Cost) | \$ 188,192,000 | |
| Total Maintenance and Operations Cost: (Table 13 Grand Total) | \$ 221,420,000 | |
| Total Enhancement Cost: (Table 14 Grand Total) | \$ 67,740,000 | |
| Grand Total Project Cost | \$ 477,352,000 | |

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