I. Project Identification

Project Title: DDS Home and Community Based Management System

Agency Name	**Agency Business Unit**
Department of Developmental Services	Office of Deputy Commr.

Your Name (Submitter) / **Phone** / **Email**

Mary DiPietro	860-418-6071	Mary.DiPietro@ct.gov

Agency Head / **Phone** / **Email**

Terrence W. Macy	860-418-6011	Terry.Macy@ct.gov

Agency CIO / IT Director / **Phone** / **Email**

Mary DiPietro	860-418-6071	Mary.Dipietro@ct.gov

Agency CFO / **Phone** / **Email**

Mary Fuller	860-418-6163	Mary.Fuller@ct.gov

Project Manager (if known) / **Phone** / **Email**

Tim Deschenes-Desmond	860-418-6058	Tim.Deschenes-Desmond@ct.gov

OPM Budget Analyst / **Phone** / **Email**

Alison Fisher	860-418-6440	Alison.Fisher@ct.gov

II. Project Details

A. Project Dates

Proposed Start Date (MM/DD/YYYY)   **Expected Completion Date** (MM/DD/YYYY)   **Project Duration** (in months)

04/01/2014	12/30/2018	56

B. **Project Description -** This information will be used for listings and report to the Governor and General Assembly on capital funded projects.

Department of Developmental Services (DDS) Home and Community Based Services Management System is comprised of three phases (referenced as projects in the Implementation APD):

Project Phase A – Case Management System Jan-2014 to Dec- 2015 Procure and implement the base commercial off the shelf software and hardware platforms. Get training, convert legacy data.
Phase B – Provider/Family Portal Oct-2015 to Mar-2016 Provider/Family orientation and rollout.
Project Phase C – Business Intelligence Capability Jan-2016 to Jun-2019 Data warehouse and analytics interface.

C. **Summary.**

Summary - Describe the high level summary of this project in plain English without technical jargon

DDS needs to modernize its current application environment to create a new automated, integrated information system that reflects the current DDS business workflow and processes. DDS is working with the Department of Social Services (DSS) to submit a proposal to the Centers for Medicare and Medicaid Services (CMS) for enhanced funding under their Advance Planning Document process to accomplish this. The resulting solution must meet the CMS Seven Technical Conditions and Standards which include modularity and scaleability of application development for enterprise wide solutions.

The core business functions of DDS, similar to those of other Health and Human Service (HHS) agencies are

- Consumer Planning
- Resource Allocation
- Fiscal and Resource Management
- Quality Management

The information system must provide functionality both within and across these major functions. The system must also be able to integrate with outside agencies that DDS interacts with, notably DSS, for whom DDS manages four large federal waiver programs. The system must be able to accommodate the emerging integrated eligibility system being developed by DSS for use by all CT HHS agencies as well as a common core assessment tool in development for these same agencies.

The desired information environment would result in greatly improved automation of business processes for DDS staff, reducing and eliminating current manual processes and redundant data entry. It will also provide access to this information to the DDS private providers, families and consumers served by DDS, as well as CT citizens who need to interact with the department. This access will allow these groups to both read and update information in the system, greatly enhancing transparency of this information and the efficiency of obtaining real time data in the system. Examples include enabling citizens to intiate the DDS eligibility process using online registration forms or allowing a family member, consumer or private provider to provide information to the annual Individual Planning process directly into the system.

The goal of the integration is for data to be entered once and then be made available to other systems and users as needed. Interagency integration will enable DDS to obtain information critical in maintaining its waiver operations such as Medicaid information from DSS.

By working with DSS and CMS on the Advanced Planning Document (APD), DDS would be able to take advantage of the current enhanced funding of up to 90% for the development of such a system. This enhanced funding is available until December 31, 2015. Based on our current estimates, DDS would qualify for an enhanced funding rate of approximately 82% for the development o f this system. DDS has been approved by CMS for the Planning APD and has been going through a process of considering vendors as part of a solution alternatives for the Implementation Advance Planning Document (IAPD). DDS has chosen the Oracle CRM product as the solution best able to meet both DDS needs and the CMS Technical Conditions and Standards. This decision was arrived at after a comprehensive national survey and comparison of three potential vendor solutions:

- Oracle CRM
- Microsoft CRM
- IBM/Curam

Current estimates are that the Oracle solution could provide at least 75% of the system implementation within the enhanced funding window ending 12/31/2015.

Purpose – Describe the purpose of the project

The purpose of this project is to provide comprehensive automation and integration of information systems across and within the major DDS business functions and between DDS and relevant other CT HHS agencies, notably DSS. This system will also provide access to DDS private providers, families, consumers and CT citizens.

Automating system processes that reflect DDS staff workflow will allow staff to more efficiently manage their work including developing and maintaining consumer individual plans, linking assessment data to the development of those plans and monitoring progress on these plans of service. DDS will be better able to manage the ever increasing network of private providers, the services they provide and the consumers who utilize these services. This will result in improved and more accurate billing, tracking consumer progress on their planning goals and assessing results and quality of these services based on this improved data. Automation of consumer planning information will transform the way in which DDS currently assesses quality of its providers and services as DDS will now have access to real time data on consumer progress on planning goals that can be linked to specific providers and services.

Interagency integration with agencies such as DSS will provide DDS with accurate data on Medicaid and Medicare enrollment as well as the host of other benefit programs administered by DSS. DDS case managers will be able to assist their consumers in maintaining these benefits by obtaining accurate information on redetermination dates and deadlines. It is also expected that this system will accommodate the enterprise integrated eligibility system being developed by DSS to improve access for the citizens of CT to services provided by the CT HHS agencies. DDS will also explore integration of data and systems with other HHS agencies.

Providing access to private providers, families, consumers and members of the general public is another critical component of this system. Private providers, families and consumers all play key roles in the development and review of consumer individual plans. Access to this system will allow them not only to view information pertinent to them but will also allow them to contribute information to the development of these documents. Private providers play a key role in documentation of progress on the Individual Plan, recording of incidents in the DDS Incident Management System and documenting services provided for billing.

The system will also provide a business intelligence component enabling DDS to produce reports and analyze information to both maintain and improve its business operations as well as to meet federal waiver assurance expectations. The latter is critical in terms of managing the major waivers DDS operates on behalf of DSS. Failure to meet these waiver assurances could result in significant loss of federal revenue for the operation of DDS services.

Importance – Describe why this project is important

This project is very important to DDS for the following reasons:

Meet CMS Federal Waiver Assurances

Currently DDS administers four CMS waivers with a fifth anticipated to be approved in January 2014, serving well over 9,500 individuals. As part of the management responsibilities, DDS is required to meet a number of waiver assurances regarding the quality and provision of these waiver funded services to these individuals. The current lack of a comprehensive, integrated information system makes data gathering and reporting on these assurances extremely difficult. This increases the risk of potential non-compliance with these waiver assurances and the resulting loss of a major source of federal revenue.

Increase DDS Staff and Provider Efficiency and Effectiveness

The current system includes many manual paper processes and even automated systems frequently include redundant data entry or non-IT supported applications (MS Access) and increase the chance for incorrect information to be entered into the system. An integrated system designed to be consistent with DDS business rules and workflow processes will significantly increase staff efficiency in managing their ever increasing workload by reducing manual processes or the need for redundant data entry.

Increased Access to more Consistent and Accurate Information

Currently access to DDS information is primarily limited to DDS staff for its automated systems and many of the current paper processes (ex. the Individual Plan) are inaccessible to even internal DDS staff. The proposed system will be accessible by outside groups such as private providers, families and consumers as well as CT citizens based on roles and authorizations. In addition, an integrated system which automates all relevant DDS processes will make this information more available to DDS staff.

Integration with outside agencies such as DSS will make important benefit information such as Medicaid and Medicare available to DDS case managers who need this information in their work. Teams responsible for developing and implementing consumer individual plans will be better able to work together and jointly document their progress in assisting the consumer in meeting their planning goals. Improved management of providers and their services will assist with billing and revenue generation. A key component of this solution is a robust business intelligence capability to enable DDS to manage its operations on both a detailed and systemic basis.

Develop HCBS Management System

A Key Deployment Initiative in the DSS Medicaid Infrastructure Technology Architecture (MITA) state self assessment is to:

> "Acquire and implement a case management system for the DDS Home and Community-Based Services (HCBS)" . Specifically referenced in that document is the DDS initiative to develop this type of a case management system which differs from DSS in that the focus is on providing needed services and supports to individuals rather than on administering befefits programs. DSS hopes that this initiative may provide a model for other CT HHS agencies for automated case management systems.

Outcomes – What are the expected outcomes of this project

The primary outcomes of this project are to better support the DDS Mission and Vision by:
1. **Improving the service outcomes for DDS consumers through improved integration of information.**
2. **Improving management of the DDS waivers.**
3. **Increasing staff efficiencies via both integration and automation of their business processes.**
4. **Build an HCBS Management System with policy automation resulting in high potential for re-use within DDS and among CT HHS agencies.**
5. **Increasing consumer and family access to their planning and support information to support self-direction.**
6. **Enhancing access to community and natural supports through increased opportunities for community building and resource-sharing.**
7. **Improving standards for how consumers, families, providers, and other stake-holders throughout the state, interact with state sponsored internet web applications.**

This will be accomplished in the following major areas:

Consumer Services Planning

- Create a portal for access by consumers, their families and the providers who support them:

  Providing access to not only view but contribute to individuals' service plans provides greater interaction by the individual and their circle of supports. It empowers individuals and families to have a greater role in service planning. Enhanced provider access allows those responsible for support services to provide critical information. This access also increases the transparency of the information for the entire team, DDS staff included.

- Interoperate with the Integrated Eligibility platform:
  It is expected this system will operate with the enterprise integrated eligibility system being developed by DSS. Citizens should be able to access the eligibility process online to intiate the eligibility application process.

- Interoperate with the common core assessment tool:
  Currently DDS utilizes the Level of Need (LON) assessment tool for determining consumer needs. This will be assimilated into the proposed system as it is developed. Once a common core assessment tool is developed for use by CT HHS agencies this tool will replace the current DDS LON tool and be interoperable with the automated system. This will inform the Individual Plan in its development.

- Automate the Individual Plan:

  The Individual Plan will be a main part of this system, accessible by DDS case managers, private providers, families, consumers and other professionals involved with the consumer. They will be able to develop and maintain the plan online and record progress towards meeting the stated planning goals.

- Create an electronic file for consumers:

  Attaching documents such as health and behavioral evaluations as well as incorporating a Case Notes system will provide an electronic file of information indexed to each DDS Consumer. This information will be accessible by members of the consumers' planning team. Real time information on that individual will then be available to those who are involved in that person's care. This will increase transparency of this information.

Resource Allocation

- Prioritize consumer needs:

  Case managers will be able to submit requests for resource allocation electronically to the Planning and Resource Allocation Teams (PRAT). Information from the Individual Plan and assessment tool will be readily available to allow the PRAT managers and team to assign a priority level for funding allocation to the individual being considered.

- Allocate Resources:

  The PRAT will have access to their regions allocated funding for support services and will make individual allocations from this information. This decision will be communicated to the consumer's team electronically and the funds will then be available to build the consumer's service budget.

Fiscal/Resource Management

- Provider/Service management:
  DDS will manage providers and the services they are qualified to provide in the proposed system. This includes managing the qualification status of providers based upon performance data by integrating with the Quality Management system.

- Managing residentialand day program appropriations and consumer budgets:
  Annual appropriations of funding for DDS support services will be managed in this system and be made available to the PRAT for individual allocations. Once an individual allocation is made a consumer budgeting system will allow the individual's planning team to build a consumer budget and purchase a variety of services to meet that indivual's needs. Budgets will be constrained by the individual allocations and any funds not utilized will be automatically returned to the regional allocation pools.

- Documenting Service Delivery:
  Providers will utilize an online system to document the specific delivery of the services authorized in the individual consumer's budget. This documentation will be used for billing for both the provider and waiver funded services.

- Quality and Fiscal Remediation Plans:

  Follow up on any issues discovered in either quality or financial areas will be tracked and followed to resolution within this system, providing documentation of these activities. This is critical in managing finances and meeting waiver assurances.

Quality Management

- Ensure Quality of Service for Consumers:
  The Quality Service Review will be incorporated into the new system to document consumer quality indicators and satisfaction. In addition, with the automation of the Individual Plan, new data will now be available to show consumer progress towards their individual goals.

- Incident Management:

  Reporting, tracking and following up on incidents of consumer injury, abuse/neglect, restraint, medication errors and others will be handled within this system. Provider staff will be able to report online in real time as incidents occur. Notification of appropriate parties will be automated. Investigation, follow up and remediation of reported incidents will also be a part of the incident management system as well as tracking "events" defined as multiple incidents related to the same event.

- Program Review/Human Rights Committees:

  These committees are responsible for review of consumer programs involving use of psychotropic medication and restrictive behavior plans. Committees review these individual

programs and make recommendations to the Regional Directors for approval, denial or approval with qualifications. The system will capture this review activity, the recommendations and track follow up reviews.

- Medication Certification:

  The system will track direct support staff certification in the administration of medication to consumers in their care.

- Provider Qualification/Service Certification:

  A total quality system integrating both proactive and event driven quality management including the components referenced above will provide a basis for ongoing qualification of the providers and services managed by DDS. This qualification status will drive the provider's ability to continue to provide services of a high quality to DDS consumers.

Business Intelligence Reporting
A business intelligence component will be a major part of the system. The improved access to information and analytics will provide DDS with the ability to monitor its activities at both an individual, program and systemic level.

Policy Automation
A feature of the software works within Microsoft Word to enable business users to convert written policies into rules for workflow. The policy or eligibility criteria is opened in Word and the Policy Automation module can format each statement to represent a web-based screen for users to fill in that can have built in logic so the user does not need to complete an entire screen of information before getting acknowledgement from the host system. This feature could be used by any agency that has a public facing site where constituents need advice depending on their unique set of circumstances.

Approach and Success Evaluation – Provide details of how the success of the project will be evaluated

Technical and Functional Requirements
As part of the Implementation APD, DDS has a detailed section on development of a project plan which includes oversight of the development of this system. DDS has outlined specific technical and functional requirements for each of the four major areas of Consumer Planning, Resource Allocation, Fiscal/Resource Management and Quality Management. These will serve as evaluation points for measuring the deliverables from the implementation partner as the system is developed and rolled out.

Enterprise Architecture Planning
DDS will engage with Oracle on an Enterprise Architecture Planning process to outline current and future architecture of the DDS information system, develop a strategic roadmap towards the future system and set up guiding principles for the development of that system. This will provide an overall framework for the successful implementation of this system.

System Development Methodology
Chief among industry-accepted best practices is systems development life cycle (SDLC) or systems development methodology (SDM) appropriate to 1) a Commercial Off The Shelf (COTS) selection and implementation and to 2) a more closely managed "iterative" approach to delivering components of the solution faster and more concretely for more meaningful end-user evaluation and project course correction.
The state SDM is adopted as the agency's project management reference. Not only does it define a systems development life cycle oriented to centralized, hosted production support, but it also gates each major project phase with formal program and project governance.   In this regard, the state SDM represents a method for ensuring stakeholder engagement at key milestone checkpoints, as well as one for controlling, managing and executing project work

DDS Project Management
DDS has had an operational APD Project Steering Committee overseeing this project for the past three

years. As the project develops this committee will take on an increasing oversight role in ensuring the success of the system implementation. The IT manager will assume project management responsibilities and will be supported and supplemented on the business side by the planning specialist for DDS while it is expected that the implementation partner will include a project manager for their implementation responsibilities.

D. **Business Goals**. List up to 10 key business goals you have for this project, when (FY) the goal is expected to be achieved, and how you will measure achievement, Must have at least one. Please use action phrases beginning with a verb to state each goal. Example: "Reduce the Permitting process by 50%". In the Expected Result column, please explain what data you will use to demonstrate the goal is being achieved and any current metrics.

Business Goal (Action Phase)	Target FY for Goal	Current Condition	Expected Result
To increase workflow efficiency and automated systems for these business areas: **Fiscal Resource Management Quality Management Consumer Services Planning Resource Allocation and Waiver Management**	FY 15-16	Salary averages for the business units have been calculated at $33.67	DDS HCBS Waiver Case Management System - Annualized Post-Implementation Benefits Total Savings as of Year 3 (FY2016): Hours and Dollars Please refer to the spreadsheet in section J. Financial Estimates, Explanation of Estimates
Work with DDS consumers, families and providers in achieving their life goals by automating the consumer planning process including creating an online eligibility application system, automated Individual Plan, integrating the Level of Need (LON) and creating an electronic case file.	FY 15-16	The current eligibility system relies on manual systems for processing and tracking eligibility applications which include a MS Access database and then separate entry into the CAMRIS legacy data system. Individual Plans are done on word documents with no automation, requiring redundant data entry. The LON does not integrate with the Individual Plan to assist in plan development. There is no electronic case file available for DDS Consumers.	Eligibility applications are processed and tracked online and eligible consumer records are brought into the system automatically. The Level of Need tool will integrate with and inform an automated Individual Plan which is accessible by the relevant team members including family and consumer. Documents related to the consumer will be indexed to that consumer and available to members of the planning team. Data to be examined will include the number and timeliness of processing eligibility applications, timeliness of maintaining individual plans and progress consumers make in achieving their stated

			planning goals.
Assist consumers in accessing needed supports and services by automating the resource allocation process and integrate it with Consumer Planning and Fiscal/Resource Management.	FY 15-16	Currently the resource allocation system is automated but lacks integration with either Consumer Planning or Fiscal/Resource Management. DDS case managers must manually submit a request for a resource allocation for their consumers and are unable to track its progress in the system. Much of the information in the request is available in systems or documents such as the Level of Need or the Individual Plan but must be manually re-entered into this request. Resource allocation decisions must be manually transmitted back to the team so they can begin construction of the consumer budget.	Requests for resource allocation will be generated from the consumer planning process and inform the Planning and Resource Allocation Team (PRAT). This will contain information from the Level of Need and Individual Plan necessary for the PRAT to process the request and assign a Priority to the individual. Resource allocation decisions will be instantly communicated to the consumer's planning team and the resources will be available to them to begin building a consumer budget. The allocation will set the budget limit and any funds not allocated for that consumer's budget will be automatically returned to the regional allocation pool.Data to be examined will include number or automated resource allocation requests and timeliness of resource allocation decisions.
Improve the financial management capability of DDS by automating Fiscal/Resource Management processes that integrate with Consumer Planning, Resource Allocation and Quality Management.	FY 15-16	Currently the Fiscal/Resource management is handled in a series of non-integrated systems. Provider and Service management is done within both CAMRIS and an MS Access database. Provider qualification is not automatically informed by the Quality Management processes. Consumer individual budgets are done in a Visual Basic application while provider contracts and their respective consumer budgets are	The functions of provider/service management will be handled within this system and will inform the consumer service planning and budgeting process. Consumer service and budget development will be consolidated within this system for both individual and contracted services. As these budgets are developed and services are set up for individual consumers, billing systems will be generated based on

		maintained within an MS Access database. Billing systems are based on CAMRIS exported data and documentation of the services provided is done via an online Web Res/Day application. Consumer budget and service information do not integrate with either the consumer planning or resource allocation processes.	this information. Documentation of services provided will be directly related to these budgeted services as well. Waiver billing will be automatically generated within this system. Quality Management evaluations of providers and services will integrate with and inform the qualified provider status. Data to be examined will include accuracy of consumer budgeting and billing.
Improving quality of life for people with intellectual disability and Autism Spectrum Disorder and their families and ensuring quality of services for all DDS consumers by automating Quality Management processes and integrate with Consumer Planning and Fiscal/Resource Management	FY 15-16	The current Quality Service Review (QSR) application relies on consumer and provider/service review by a number of quality inspectors and case managers. Reviews consist of a series of indicators which are then rated and provide information on the quality of the providers and services. DDS has an Incident Reporting system in CAMRIS but it does not include the functions of notification or remediation and relies on a manual paper process for submitting incident report which then need to be data entered into the CAMRIS system resulting in significant delays in recording this information. Medication certification utilizes a Dbase program which needs to be upgraded. The regional Program Review and Human Rights Committees have no automated system for recording and tracking their recommendations. None of the current quality systems integrate with each	It is expected that automating the Individual Plan process will transform the Quality Management system. This automation will enable tracking of consumer progress towards their planning goals on a system basis, linking this information to the related providers and services the consumers receive. The quality review system will be much better integrated with other quality systems such as Incident Management, Medication Certification and Program Review and Human Rights Committees. This will enable a total quality picture to emerge for consumers, the services they receive and the providers responsible for the provision of those services. The Incident Management system will be an online reporting system allowing incident information to be entered in real time and will provide notification to the relevant parties and include a follow up and remediation component. It

		other or other DDS systems.	will also enable "event tracking" so incidents that are all part of the same event can be linked together. Data to be examined will include consumer progress on individual planning goals, provider quality assessments and all other quality data generated.
Supporting families as an important and permanent unit of development, protection, and lifelong assistance to persons with intellectual disability and Autism Spectrum Disorder (ASD) as well as increasing self-determination and personal control to people with intellectual disability and ASD by increasing access to the DDS HCBS management system for consumers, families and providers.	FY 16	Currently private providers have very limited access to DDS information systems. It is limited to part of the QSR and the Web Res/Day billing system. Families and consumers have no access to any of the DDS information systems.	Rollout of the provider and family/consumer portals will enable access to the HCBS management system on a role-based authorization basis. Data to be examined will be number of users and roles interacting with the system on a daily/annual basis.
Improve DDS operational management and system improvement by the development of Business Intelligence and reporting capability within the HCBS management system	FY 16	Reporting is currently limited to standardized reports and a small number of DDS "Power Users" capable of generating ad hoc reports on request.	Creating a Business Intelligence capability will provide significantly better reporting and business analytics to all stakeholders including DDS program and administrative staff, private providers, families and consumers. Data to be examined includes numbers of reports and improved business analytics.

E. **Technology Goals**. From a technical perspective, following the above example, list up to 10 key technology goals you have for this project and in which Fiscal Year (FY) the goal is expected to be achieved. Please use action phrases beginning with a verb to state each goal. Example: "Improve transaction response time by 10%".

Technology Goal	Target FY for Goal	Current Condition	Expected Result
Implement 100% configurable solution for Case Management choice for Customer Relationship Management (CRM), commercial off the shelf (COTS) software programs for the HCBS system.	Q2 SFY16	Ref. IAPD - Section 3. Current As-Is Systems Environment The original PAPD submitted February 2011 and CMS-approved July 22, 2011 included an As-Is diagram.	Ref. IAPD - Section 5. Anticipated Project Benefits The project's benefits from effective application of a well-architected software framework

		Changes since then have been noted as highlighted, Attachment 1. A standalone Contracts database has been developed, and a redundant Waiver Management database removed.

While necessary operational improvements, these changes do not address the systemic HCBS Waiver Management system deficiencies noted in the PAPD.

In short, these are:

1)   A centralized legacy database whose structure does not support best practice. As a result:

o   There is no data analytics capability required for life-long consumer plan and outcomes review, consolidated quality service reviews, and integrated waiver assurances reporting

o   There is no self-consistent comprehensive database automatically storing the results of HCBS Waiver Management functional workflow from which accurate reports can be generated for any summary, longitudinal, comparative, or detail view

o   The legacy data structure has been functionally disassembled because it does not support a person-centric data model (which could have been holistically reverse-engineered for redesign then regeneration had there been a supporting target environment, and might still represent a data conversion strategy) | designed for configurability are identified and assessed as part of the Feasibility Study (Section B).

As part of that study, DSS-DDS business owners and end-users scored the vendor-demonstrated results of configuring the selected on-contract COTS, to fulfill DDS business requirements of the To-Be HCBS Waiver Management System.

The results assessed were business results; including on the one hand, an estimated end-user productivity gain, and on the other, identified consumer-service process improvements, two sides of the same coin.

These benefits were identified, measured where feasible, and utilized in the Cost-Benefit Analysis (Tab 1) conducted for the scoring-determined top-two configurable COTS under consideration, Oracle CRM and IBM Cúram.

Overall, anticipated project benefits of the To-Be HCBS Waiver Management System include:

1.   Streamlined DDS HCBS Waiver Management business processes that result from

o   cross-functional design collaboration
o   an expanded scope of automation
o   configurable workflow and business rules
o   comprehensive data integrity |

		2) There is no automated workflow from one functional HCBS Waiver Management application to another 3) Numerous vertical, uncoupled functional applications are coded on non-scalable database structures As indicated, the current DDS HCBS Waiver Management System offers significant opportunities for improved economies and efficiencies. These are identified and measured as part of the Feasibility Study (Section B) whose results made development of an empirical Cost-Benefit Analysis (Tab 1) possible.	o data analytics 2. Observed improvements in DDS HCBS Waiver Management business results that include o Improved timeliness of consumer service plans, budgets, and quality reviews o Improved ability to collaborate, internally and externally o Improved accuracy of information in the process or its results o More accessible process information (to appropriate roles) o Improved stakeholder satisfaction (end-user, providers, families, consumers) o Improved process consistency
Achieve CMS Medicaid Information Technical Architechture Technical Standards compliance for federal reimbursement up to 82% of the project costs.	Q2 SFY16	Ref. IAPD - Section B – Summary of Requirements Analysis, Feasibility Study, and Alternatives Analysis 1. Agency Reviewed Business-Process-Driven Solution Requirements Shortly after CMS approved the PAPDU (1/6/2013), DDS resumed the project based on the collaborative agency workshops 2011 which produced its MITA-subset Business Process Model, representing its High-Level Business Requirements. The PAPDU included a comparative options review as basis for preferring a configurable COTS and/or state transfer; in either	Ref. IAPD – Section B Measurable advances in MITA (Medicaid IT Architecture) maturity, discussed in Section B. DDS Implementation of Oracle CRM, with an Implementation Partner to be bid, is expected to raise the DDS "background" systems maturity beyond level 3, designated in the original Carnegie-Mellon SEI (Software Engineering Institute) terms, as a "managed" level of systems capability, one where, per CMS' MITA, business processes are consolidated, systems are open and inter-operable, electronic data are

| | | case, compliant with CMS technical conditions and standards. Discarded options included continued internal build, custom-coded COTS, including subscription SaaS (Software as a Service). While SaaS can be the most economical option, where it may substantially reduce internal state maintenance costs, the stumbling block for the agency is loss of ownership and control of sensitive data.

While it was feasible to research potential state transfers, later completed with the results reported below, had the research been pursued before assessing the COTS marketplace, DDS may have drilled in a misfit technology scope, possibly overlooking a more competitive, leading-edge COTS solution not yet state-implemented.

Without further COTS assessment, DDS leadership would not have confidence that a solution typified as "case management" should be selected over one typified as "automated forms and workflow", "enterprise content management", "business process management", "customer relationship management." They all intersect and could enable some subset or another of DDS Business Processes.

The COTS marketplace, for social services case management alone, returns 194,000,000 Google search results. Vendor-specific | consistent across uses based on master data management.
Modularity
This condition requires the use of a modular, flexible approach to systems development, including the use of open interfaces and exposes application programming interfaces (API); the separation of business rules from core programming; and the availability of business rules in both human and machine-readable formats.
MITA Advancement
States to align to and advance increasingly in MITA maturity for business, architecture, and data
Industry Standards
States must ensure alignment with, and incorporation of, industry standards
Leverage
State solutions should promote sharing, leverage, and reuse of Medicaid technologies and systems within and among states
Business Results
Systems should support accurate and timely processing of claims, adjudications, and effective communications with providers, beneficiaries, and the public
Reporting
Solutions should produce transaction data, reports, and performance information that would contribute to program evaluation, continuous |

		COTS could not be feasibly researched individually...	improvement in business operations, and transparency and accountability **Interoperability** Systems must ensure seamless coordination and integration with Exchange (whether run by the state or the federal government), and allow interoperability with health information exchanges, public health agencies, human service programs, and community organizations providing outreach and enrollment assistance services. Reference section 9. Oracle CRM Compliance with CMS 7 Technical Conditions and Standards How Oracle meets this condition
Implement project management methodology utilizing the state system development methodology for COTS during and after the enhanced federal funding timeframe the SDM will be used through post-implmentation of phase C.	Q2 SFY19	Ref. IAPD - Section C - Project Management Plan 3) Systems Development Methodology (SDM)

Chief among industry-accepted best practices is an SDLC (systems development life cycle) or SDM (systems development methodology) appropriate to 1) a COTS selection and implementation and to 2) a more closely managed "iterative" approach to delivering components of the solution faster and more concretely for more meaningful end-user evaluation and project course correction.

The state SDM is adopted as the agency's project management reference. Not only does it define a systems development life cycle oriented to | • Collaborating with DAS/BEST with regard to overall Oracle CRM solutions impact on the state EWTA and support for DDS new and legacy production deployment to the state's centralized Data Center production environment; • Partnering with Oracle's EAP team (4-6 weeks) on facilitated General Design as impacted by DDS LEAN results. The approach is expected to pursue Integrated Eligibility as a primary case study for understanding how the Oracle CRM architecture comes into play to support the enterprise HHS initiative. Other case studies will pursue agency-specific functionality, such as consumer services |

		centralized, hosted production support, but it also gates each major project phase with formal program and project governance. In this regard, the state SDM represents a method for ensuring stakeholder engagement at key milestone checkpoints, as well as one for controlling, managing and executing project work 4) Standards, Contracts and Procurement The state DAS/BEST (Bureau of Enterprise Systems and Technology) Enterprise-Wide Technical Architecture (EWTA) supports an array of vendor product and service contracts. While not all represent the state's current strategic standards, many do. Customer Relationship Management (CRM) is a class of technology solutions for which the state does not have a designated standard (as of this writing). However, the state does have master agreements with the three configurable COTS vendors other states have selected and implemented for enterprise-level HIX, IE, or ID (Intellectual Disability)-Eligible Case Management. Accordingly, no state bid was needed to identify these vendors, foster greater competition for the same nature and scope of solution, or procure needed project software, hardware, or training. Regardless of the COTS	planning, as configured for the labs. **Reference Section C.** **4. System Life** The system is expected to maintain its useful life indefinitely, provided the state plans, funds, and applies vendor COTS maintenance releases within their support horizon. So long as the agency consistently leverages the configurability of the system, and agency code modifications are minimal, the COTS design would not degrade as long-term result of quarterly or annual code-complicating enhancements. One measure of this difference in useful systems life between what can be expected of COTS, especially a configurable one, compared with that of an internally developed software application, can be extrapolated from IRS (Internal Revenue Service) guidelines for capital treatment of same. The IRS capitalizes COTS (for depreciation) with the equipment that supports it. So, for example, mainframe-resident COTS would have a useful life of 10 years, while server-resident COTS would have one of 7 years. Either is in sharp contrast with the IRS useful life associated with internally developed software as "> 2 years"! In short, the state can expect a useful life, post-implementation, from a configurable COTS that is 3-5 times greater than that from building the

		framework selected, DDS plans to issue a bid for an implementation partner. Although several potential Implementation Partners for one or another of the COTS on state contract are also on state contract, not all of them, utilized by one state or another, are also on state contract (or applicable governmental contracts).	same solution "from scratch."
Develop a data warehouse for Business Intelligence Capability and ad-hoc reports is Phase C.	Q4 SFY19	Systems Implementation and Design is projected to start April 1, 2014, based on January 1, 2014 CMS approval of the IAPD/Bid (DSS-DDS IAPD/Bid transmittal by September 30, 2013 assumed), and a state completed ITB-based contract award Q114. The consequences of up to a quarter's delay are not a "showstopper" for the 2014 Core HCBS Waiver Case Management System (Project A), but would pressure the 2015 Provider Portal production rollout (Project B) and 2015-2016 Business Intelligence (Project C) capability as well as raising the state's unreimbursed Total Five-Year project costs. The proposed baseline project plan relative to which the project is expected to be managed by the state will be required of Implementation Partner bidders, including that for the Core Case Management, Provider Portal, and Business Intelligence systems. Reference e. Baseline 2014-2016 Project Planning	The Department's Mission and Vision are supported by the Commissioner's Five-Year Plan, available on the DDS Web site (ct.gov/dds). The Five-Year Plan includes 25 specific goals for 2012-2016 in support of the DDS mission and vision. Every one of them is an instance of one or another of the NASDDDS program goals defining national best practice. These represent the new and changing program needs of the agency. As mission-aware as the Department's goals are, most of them call for enabling technology, including the know-how to streamline processes for improved efficiencies in achieving quality results. Many of the DDS Five-Year Plan goals (referenced below by number) cannot be met, or met efficiently, without achieving the following Information Technology (IT), or "technical," objectives: • Leverage pervasive consumer IT (VoIP, smartphones, tablets, social media) for

			networking, building consumer communities, and providing safe supports (1,2,3,8) • Grow the Web as public information repository, including the agency's public Web site for providers, consumers, their families (7,10) • Streamline state processes for a more responsive, efficient government (15,16,18,20) • Automate the agency's streamlined workflows for a more productive workforce, both public and private (18,22) • Reap the business intelligence (BI) benefits of a fully integrated workflow to develop the capacity to monitor and improve quality (21) These represent the agency's systemic opportunities for efficiencies and economies.

F. **Priority Alignment.** The criteria in this table, in concert with other factors, will be used to determine project priorities in the capital funding approval process. Briefly describe how the proposed projects will align with each criterion.

Priority Criterion	Y/N	Explanation
Is this project aligned with the Governor's Key Priorities?	Yes	Obtaining and protecting federal revenue is an aspect of getting the fiscal items in order. The program will promote and allow transparency with individuals who receive services and their families. 1. User-friendly and efficient for citizens: the commercial off the shelf software under consideration is an industry leader in customer interaction programs. 2. Information and services available and easy to find on-line: the Provider Portal component will enable service providers and consumer's families to update, evaluate and select services. 3. Efficient, modern business practices: Service plans and action plans drive the success of the DDS mission insofar as they are measures of resource allocation and waiver reimbursement from HHS. A modern technology platform gets return on investment with increased credibility and constituent confidence.

		The modular commercial off the shelf application can be used for multiple purposes because the workflow components fit together without programmer customization.
		4. Increased transparency for public and private policy makers: a system of business intelligence information provides a dashboard of statistics that are readily accessible for discussion and collaboration. Analysis and trending will be the logical extension to the collection of inspection data.
		5. Reduce costs to the state regarding implementation: DDS is ready to see a well-rounded technology advancement plan take shape.
		6. Implement systems needed in support of health care reform: DDS has pledged to reflect more emphasis on the family's continued involvement across the lifespan; healthcare, education, employment and other socially valued roles for individuals with intellectual disabilities. The system will accommodate multi-disciplinary collaboration and data sharing.
		7. Ensure the appropriate confidentiality, integrity and availability: DDS is a dedicated HIPAA agency that has made security compliance a high priority. Technology needs to protect information and keep it accessible; an application suite should serve the needs of those authorized to interact, a system producing credible information justifies the expense of intelligent design and implementation.
Is this project aligned with business and IT goals of your agency?	Yes	The project is aligned both with business and IT goals, but also with federal requirements. The DDS Five Year Plan envisions a connection with individuals, families, and providers that the current IT structure cannot support. It is moving from standalone legacy application to integrated, configurable applications.
Does this project reduce or prevent future increases to the agency's operating budget?	Yes	This project will enhance the deparment's ability to demonstrate compliance with HCBS waiver assurances. This should reduce future increases and protect the flow of federal revenue. The increased efficiencies are primarily in productivity gains with existing staff. This will result in significant improvement of services to DDS Consumers and families and should reduce the need for future staff increases in areas of Case Management, Resource Management and Quality Management.
Will this project result in shared capabilities?	Yes	This project will allow information to be shared with individuals, families, private providers and DSS. Sharing with other state agencies will also be pursued. The Oracle CRM system provides a configurable solution that has high potential for reuse with other HHS agencies. It is expected that this system will also interoperate with CT enterprise solutions such as the integrated eligibility system and common core assessment tool.
Is this project being Co-developed through participation of multiple agencies?	Yes	This project has the support of DSS. They participated on the steering committee and as the lead Medicaid agency, have an active role in reviewing programs and communicating with the federal government.
Has the agency demonstrated readiness to manage project of this size and scope?	Yes	The decision to purchase a configurable off the shelf software was based on comprehensive review of the features as well as recognition that the agency lacked the business user and IT resources to create a customized solution. The agency has a

		demonstrated ability to prioritize resources and manage change. DDS's IT department has successfully worked with BEST on a variety of initiatives. DDS plans to devote an IT manager to the project and will be temporarily assigning a staff from key business areas to the project based on their expertise. DDS technical staff will receive training and knowledge transfer from both Oracle and the designated implementation partner to allow them to maintain the new system after full deployment. DDS is currently working with Oracle on Enterprise Architecture Planning which, among other objectives, will assess current staff readiness and identify needed skill sets for maintenance of this system.
Is the agency ready to deliver the business value proposed?	Yes	DDS has joined with stakeholders including people with intellectual disability, families, members of the private provider community, DDS employees and colleagues from other state agencies to develop a new mission. This mission requires a fundamental change in how DDS interacts with individuals and families. Streamlined systems and access to information are critical to achieving the mission. This project enjoys unified support from the Commissioner and his management team. DSS, as lead Medicaid agency, has been involved throughout the process and supports this proposal. DDS employees who will be active users of the new application will be active users of the system have been involved in the review of the COTS application and will be an integral part of the development process. The commitment of all parts of the organization and the potential benefits for individuals and their families will drive the agency to achieve the business value. DDS has met extensively with various staff stakeholder groups to discuss automating processes such as the Individual Plan and the budgeting and contracting system over the last several years. DDS staff, including private providers, are greatly invested in modernizing the information system.

G. **Organizational Preparedness**. Is your agency prepared to undertake this project? Is senior management committed, willing to participate, and willing to allocate the necessary time, energy and staffing resources? How will the project be managed and/or governed and who will make the key project decisions?

> The agency has already embarked on a comprehensive planning process required by the federal government in order to receive enhanced federal match. This has made key managers aware of the scope and the organizational demands. The executive sponsor is the Deputy Commissioner and senior management make up part of the steering committee membership. The agency has a person assigned to coordinating LEAN activities. IT has experience with managing applications and preparing them for transfer to the BEST host services. Organization plans for Staffing requests to be made for 2 TA's ½

H. **Project Ramp Up**. If capital funds are awarded for this project, how long will it take to ramp up? What are the key ramp-up requirements and have any off these already been started? For example, has a project manager been identified? Has an RFI been issued? Is a major procurement required such as an RFP?

> Because DDS is currently completing the IAPD process and receiving enhanced federal funding, DDS is well positioned to quickly ramp up. As part of the IAPD process there is already a working steering team that includes members of senior management and DSS representatives. This is incentivized by the time limits on the enhanced funding DDS would receive with an approved "Advanced Planning Document." DDS has submitted to fill an Information Technology Manager 1 which will provide the additional IT management necessary for implementation. DDS is working with the top rated vendor on

I. **Organizational Skills**. Do you have the experienced staff with the proper training to sustain this initiative once it's a production system? Do you anticipate having to hire additional staff to sustain this? What training efforts are expected to be needed to maintain this system?

> The selection of the COTS will minimize the amount of customization in initial implementation and when future changes are necessary, staff will be trained on configuring the system so that changes can be made when needed. DDS has a experienced group of IT staff who work cooperatively with BEST to implement improvements to existing application. They will need to be trained by the implementation partner regarding the specifics of the COTS, which will replace the existing application. Additionally, some updating will likely be completed by Oracle and/or the implementation partner. Therefore we believe we can maintain the system with existing staff and the IT Manager 1 which the department previously had filled and is within the department's funded position count. Organization plans for Staffing requests to be made for 2 TA's ½ FY17 and 3 TA/SME in FY19.

J. **Financial Estimates.** From IT Capital Investment Fund Financial Spreadsheet

Estimated Total Development Cost	Estimated total Capital Funding Request	Estimated Annual Operating Cost	One Time Financial Benefit	Recurring Annual Financial Benefit
$19,775,472	$10,995,671	$2,033,612	$3,632,653	$16,625,179
Explanation of Estimates				

Estimated One Time Financial Benefit is the enhanced federal funding difference between 50% and 82% for ½ FY14, FY15 and ½ FY16.

Recurring Annual Financial Benefit is derived from DDS HCBS Waiver Case Management System - Annualized Post-Implementation Benefits Total Savings as of Year 3 (FY2016): Hours and Dollars

DDS HCBS Waiver Case Management System - Annualized Post-Implementation Benefits Total Savings as of Year 3 (FY2016): Hours and Dollars

	Private Providers	DDS Administration	DDS Eligibility	DDS Case Management	DDS Resource Management	DDS Operations	DDS Fiscal	DDS Quality Improvement	DDS Investigators	Grand Total
Fiscal Resource Management	50,444			16,800	196					67,440

Quality Management	53,303	784		6,402	517	157		251,004	1,829	313,996
Consumer Services Planning	31,564		696	58,486	627					91,373
Resource Allocation and Waiver Management	13,361	1,179		6,189	230					20,959
										-
System-Wide Hours Saved	148,672	1,963	696	87,877	1,570	157	-	251,004	1,829	493,768
Total Cost per hour (average hourly rate including fringe)	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67	$ 33.67
TOTAL SAVINGS	$ 5,005,786.24	$ 66,094.21	$ 23,434.32	$ 2,958,818.59	$ 52,861.90	$ 5,286.19	$ -	$ 8,451,304.68	$ 61,582.43	$ 16,625,168

Assumptions: Please list key assumptions you are using to estimate project development and implementation costs
The nature and scope of the project activities are those required for and supportive of effective and efficient technology transfer of a specific vendor COTS software framework (Oracle CRM) for development of a DDS-configured agency CRM (customer relationship management) solution. As a result of the selected (primary and secondary) COTS' configurability, an indicator of compliance with CMS technical conditions and standards, it is expected that the agency will not be required to rewrite system code for functional business process or rule changes, nor to maintain that modified code base with every future COTS product maintenance release. As a result, code modifications are minimized in favor of pre-built customization tools already within the scope of the COTS package.

III. **Expanded Business Case**

A. **Project Impact.** Beyond the top business goals identified in Section II, 1) What impacts will this project have, if any, in the targeted areas below, 2) What would be the impact of not doing this project, 3) How will the project demonstrate benefits are achieved.

(1) Impact Area (Vision)	Y/N	Description of Project Impact

Will this project provide efficient and easily accessible services for all constituents?	Yes	This project provides efficient and easily accessible services for all constituents, consumers, families, service providers; also agency staff and administrators. For example CT citzens will be able to complete online eligibility applications. Families and consumers will be able to search for and evaluate needed providers and services.
Will this project promote open and transparent government with the citizens of the state?	Yes	This project will promote open and transparent government with the citizens of the state. It provides DDS the opportunity to allow consumers, families and service providers the ability to access records, participate in consumer planning, reduce the redundancy for information gathering, reduce use of paper files, transcription errors and duplicate data entry functions. It also allows consumers, families and service providers the ability to communicate more efficiently with DDS staff and administration.
Will this project establish efficient and modern business processes?	Yes	This project establishes efficient and modern business processes through the integration of data (both within DDS and between DDS and other HHS agencies such as DSS), automation of referrals, reports and data retrieval.
Will this project increase accuracy and timeliness of data for policy making, service delivery and results evaluation?	Yes	This project increases accuracy and timeliness of data for policy making, service delivery, federal reporting to CMS on DDS's four waivers, consistency in reporting , results evaluation and projection for long term service models, resources and revenue growth. It will provide legislators and policymakers with access to data analytics for use in development of legislation and policy making decisions.

2) What is the expected impact of NOT doing this project?
The current DDS service planning systems will remain fragmented without integration of data. Information will be stored in paper files or "siloed" applications and continue to be updated manually by DDS staff. DDS will not be able to take advantage of the efficiencies provided by a comprehensive, integrated application system. If DDS cannot build a more integrated system we will have less transparency for CT citizens, consumers, families, service providers and DDS staff.   Not completing this project will both continue the risk of non-compliance with the CMS waiver assurances and reduce the ability of DDS to maximize revenue through improved billing and reporting systems such as its waiver and targeted case management programs.

(3) How will you demonstrate achievement of benefits?
DDS utilized the Medicaid IT Architecture (MITA) Reference Model to evaluate baseline systems capabilities. DDS conducted stakeholder pre-implementation assessment (As Is) to develop predictions of future performance (To Be) utilizing the MITA criteria. Post-implementation assessments will demonstrate achievement of benefits through performance gains such as increased productivity.

B. **Statutory/Regulatory Mandates.** 1) Cite and describe federal and state mandates that this project in intended to address. 2) What would be the impact of non-compliance?

(1) Statutory / Regulatory Mandates:

DDS currently operates four 1915(c) Home and Community Based Services Waivers approved by the Centers for Medicare and Medicaid. The Medicaid Home and Community-Based Services (HCBS) waiver program is authorized in §1915(c) of the Social Security Act. The commitment by a state to operate a HCBS waiver program is done in accordance with statutory requirements. Approval or renewal of a waiver is contingent on CMS determining that the program's design will result in meeting the assurances contained in 42 CFR §441.302.
http://cfr.vlex.com/source/code-federal-regulations-public-health-1091

Targeted Case Management revenue maximization; Deficit Reduction Act of 2005 updated ruling issued and implemented in CT in 2010.

Compliance with the Affordable Care Act- Healthcare Integration and Medicare-Medicaid Dual Eligible enrollees focused on improving quality and access to care for Medicare-Medicaid enrollees, simplifying processes, and eliminating regulatory conflicts and cost-shifting that occur between the Medicare and Medicaid programs, states, and the federal government.

http://www.hhs.gov/healthcare/rights/law/title/v-healthcare-workforce.pdf
http://www.medicaid.gov/AffordableCareAct/Provisions/Dual-Eligibles.html

Balancing Incentive Program compliance and adherence to Americans with Disabilities Act (ADA), as required by the *Olmstead* decision. The Balancing Incentive Program was created by the Affordable Care Act of 2010 (Section 10202).

http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Support/Balancing/Balancing-Incentive-Program.html

(2) Impact of non-compliance:
The impact of non-compliance could impact Home and Community Based Waivers assurance reporting, violate compliance with the Affordable Care Act and HIPAA Privacy rule. The result of this could be loss of substantial federal revenue.

C. **Primary Beneficiaries.**   Who will benefit from this project (citizens businesses, municipalities, other state agencies, staff in your agency, other stakeholders) and in what way?

DDS Staff will benefit from the increased efficiencies the automated and integrated HCBS Management system will bring. There will be less of need for redundant data entry, manual processes and automated systems that do not reflect the current staff business processes and workflow.
Provate Providers will have significantly increased access to this system in areas of individual planning, billing and budgeting, provider/program management and quality management.
Consumers will have the ability to view their records and will receive greatly improved services and supports as members of their team have the ability to both enter and review information critical to assisting the consumer in achieving their planning goals.
Families will have a much greater ability to both access records concerning their family member as well as participate in the planning process.
DDS will benefit from the Business Intelligence reporting generated from this system which will assist in data analysis and improving systems.
Other state HHS agencies have the potential to benefit from a scaleable and reuseable case management system which could be adapted for other agency operations. In addition, the information generated in the DDS HCBS management

system can be accessible to other agency operations and better able to interoperate with systems such as the integrated eligibility application.

CT State Citizens will have improved access to DDS information by utilizing online services such as the eligibility application.

Important:

- **If you have any questions or need assistance completing the form please contact Jim Hadfield or John Vittner**
- **Once you have completed the form and the** IT Capital Investment Fund Financial Spreadsheet **please e-mail them to Jim Hadfield and John Vittner**

John Vittner, (860) 418-6432; John.Vittner@ct.gov
Jim Hadfield, (860) 418-6438; Jim.Hadfield@ct.gov