

## I. Project Identification

**Project Title:**

<b>Agency Name</b>	<b>Agency Business Unit</b>
<input type="text" value="Department of Developmental Services"/>	<input type="text" value="Quality Management"/>

<b>Your Name (Submitter)</b>	<b>Phone</b>	<b>Email</b>
<input type="text" value="Mary DiPietro"/>	<input type="text" value="860-418-6071"/>	<input type="text" value="mailto:Mary.DiPietro@ct.gov"/>

<b>Agency Head</b>	<b>Phone</b>	<b>Email</b>
<input type="text" value="Terrence W. Macy"/>	<input type="text" value="860-418-6011"/>	<input type="text" value="mailto:Terry.Macy@ct.gov"/>

<b>Agency CIO / IT Director</b>	<b>Phone</b>	<b>Email</b>
<input type="text" value="Mary DiPietro"/>	<input type="text" value="860-418-6071"/>	<input type="text" value="mailto:Mary.DiPietro@ct.gov"/>

<b>Agency CFO</b>	<b>Phone</b>	<b>Email</b>
<input type="text" value="Mary Fuller"/>	<input type="text" value="860-418-6163"/>	<input type="text" value="mailto:Mary.Fuller@ct.gov"/>

<b>Project Manager (if known)</b>	<b>Phone</b>	<b>Email</b>
<input type="text" value="Mary DiPietro"/>	<input type="text" value="860-418-6071"/>	<input type="text" value="mailto:Mary.DiPietro@ct.gov"/>

<b>OPM Budget Analyst</b>	<b>Phone</b>	<b>Email</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>

## II. Project Description

### A. Project Dates

<b>Proposed Start Date (MM/DD/YYYY)</b>	<b>Expected Completion Date (MM/DD/YYYY)</b>	<b>Project Duration (in months)</b>
<input type="text" value="07/01/2013"/>	<input type="text" value="06/30/2015"/>	<input type="text" value="24"/>

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, Quality of Services Review electronic application redesign.

# Capital Investment Fund White Paper

for DDS Quality Services Review (QSR) Inspection Application System

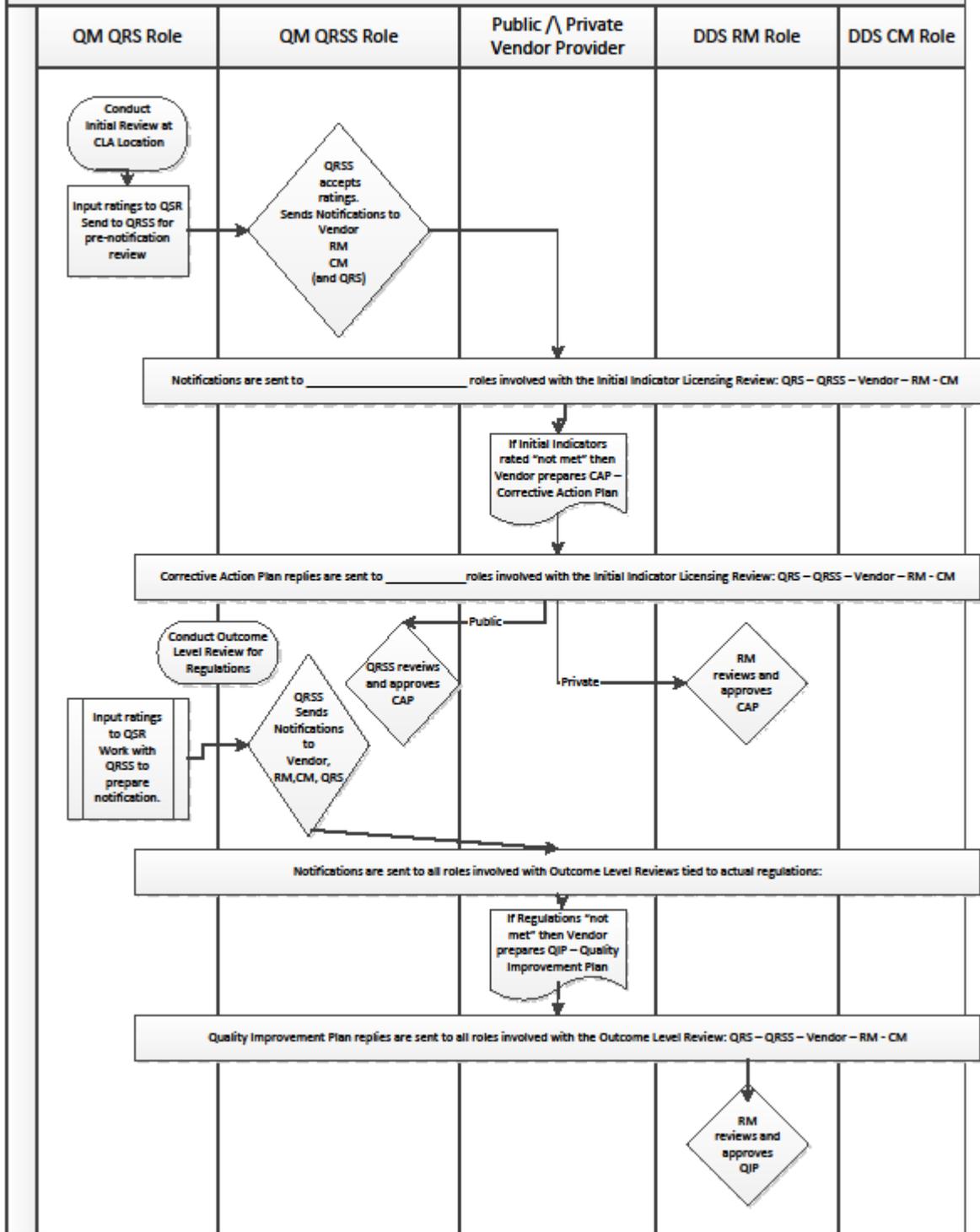
## A. Description of Problem, Need or Value

1. What are the problems, needs and/or values that justify the project? The problem with the QSR System currently in place is that it does not meet the needs of the stakeholders. The stakeholders are DDS Employees, DDS Providers and Families, DDS Management, DDS IT Staff, and the Centers for Medicaid Federal Waiver Assurance reimbursement reporting process. The problem with the system is that it was designed by an external consulting company several years ago to meet business issues and requirements that have vastly changed since the implementation.
  - a. DDS Quality Review Specialists are the QSR staff who perform inspections and input and update the records in the system. The navigation to specific inspection and interview tasks on the computer screen does not conform to the tasks being done because roles have changed. The time spent navigating through the system to get to the appropriate screens costs over an hour during the inspection process. This means that inspection or interview data that should be entered during the visit cannot be done in real time. The Quality Review Specialist must take notes on paper and then transcribe them into the computer by visiting a regional office and connecting to the QSR application. This is compounded by several other similar functions that are not automated, such as mapping the location of the inspection, scheduling the inspector or an alternate, having the case documents on screen because now they must be printed and are in excess of 50 pages without search capability.
  - b. DDS Quality Review Specialist Supervisors are charged with reviewing the work of the QRS interviewers and accepting or determining the ratings are “not met”. The process is delayed because the data entry does not get finished promptly. This process takes 2 business days to complete and send to the provider. If ratings are not met the provider is notified that they must prepare a Corrective Action Plan and respond within 10 days.
  - c. DDS Providers must wait for notification that the data has been entered and reviewed by email. This results in delays for Providers to prepare the Corrective Action Plan so that the problem is not immediately addressed. Problems impact the consumer health and safety.
  - d. Families do not have immediate information about the status of the Provider, the results of the inspection or the corrective action plan.
  - e. DDS Management has to wait for data reports that take time to be compiled so do not have immediate access to business intelligence for decision making. The report process can take weeks because the information is not ready.
  - f. DDS IT staff has taken on the role of enhancements to the original QSR system because the statement of work for the consultant ended 5 years ago. Due to the extreme value of the information in the system, constant enhancements require applications developers to use many hours modifying and testing new code.
  - g. The Centers for Medicaid federal waiver assurance require timely reports on the indicators that QSR evaluates during the inspection process, these are in arrears and must be submitted through DSS. The waiver assurance reports are based on a data structure that is too complex and needs to be extracted and transformed in order to get the correct format and percentages. Waivers are administered at different intervals, by calendar year, and require separate sets of control groups, consumers, to be approved for reimbursement.
2. What data exists that validates your perception of the problem, need or value?
  - a. The goal should be the ability to perform inspection interviews for all of DDS’s 15,000 consumers on an annual basis; at this time 3250 to 4250 get scheduled.
3. How will the problem, need or value change through this project?
  - a. Stakeholders will have immediate access to information by the design of a new application that meets their needs because it will be based on the roles they play in the process. This will result in transparency, process efficiencies and save time so more inspections can be completed.

## B. Overview of Proposed Project

1. What is the basic purpose of the project?
  - a. The purpose of the project is to reduce time by giving the mobile workforce of QSR staff smart devices as tools for mapping, scheduling and performing the Quality Service Reviews. The QSR application will be redesigned to focus on the roles and enhanced computing features that have come into the business and industry since the original design was done six years ago.
2. Who will benefit from it?
  - a. This application can be expanded for Public Health Inspectors and DCF Inspectors.
3. Describe the geographic area and population to be served.
  - a. The geographic area includes any DDS location where a consumer is being served, in-state or out-of-state. Currently estimated at 15,858 not including the Birth To Three
4. How does this project help fulfill the institution's mission and fit into the framework of its other programs?
  - a. This project is important because The Department of Developmental Services FIVE YEAR PLAN Goals for 2012-2017 include five stated goals for Quality Services and Supports:
  - b. Redesign the Quality Service Review, incorporating input from both the public and private sectors, and increasing family and consumer involvement.
  - c. Redesign the Continuous Improvement process, incorporating consumer reviews.
  - d. Do more with less by streamlining processes to eliminate redundant paperwork and make process electronic where possible.
  - e. Find valid ways to make information on provider quality available to individuals, families and the general public.
  - f. Ensure consistency in processes across the three regions.
5. How is this project unique? Is it similar to other programs but covers a different area? Does it employ a new approach?
  - a. This project is unique because it will utilize new technology tools and a role based security model for easy navigation.
  - b. It is similar to other programs in that several agencies throughout the state also perform inspections and interviews that need data entry applications.
  - c. The new approach will be to allow mobile workers to use location mapping features, touch screen data entry choices and to avoid unnecessary printing of protected healthcare information.
6. Why does this project deserve prioritization more than others competing for attention?
  - a. A major data source for the Medicaid Revenue reimbursements is the QSR Waiver Assurance Indicator Report. Federal Medicaid funding returned to the General Fund has grown from \$332M to \$515M as a result of the assurance process. There are more opportunities for waiver reimbursement using criteria reports from QSR.
  - b. As other agencies perform similar functions, the opportunity for expansion and revenue growth is there.
7. What is the marketing mix: product, price, promotion, place and position?
  - a. The product is a mobile device application that can be shared and customized for any interview or inspection process. Anticipated cost benefit is the reduction of travel time, and doing more inspections with the same number of resources.

St of CT ~ DDS CLA Regulations ~ Initial Licensing and Outcome Level Review workflow ~ January 2012 ~ draft



CURRENT PROCESS

Activities Involved in Inspection Process	Total number of pages	Number of reports	Cost 325 reams	Hours Used	Reams of paper	Wages	Cost of Activity	Single cost of each inspection now	Single cost after implementation
Getting Directions									
Printing Costs for Directions									
Travel 1 hour each way				6300		36.5	\$237,250.00 *	\$73.00	\$36.50
Printing background reports (50) pages	162500	3250	1300		325		\$1,300.00 **		\$0.00
Report printing time 10 minutes per report	32500			541 hours		36.5	\$19,746.50 **	\$6.08	\$0.00
Enter Inspection Data (8 hours)				26000		36.5	\$948,000.00	\$292.00	\$146.00
Total Reviewer and Supervisor for 1 insp.				26000		38.69	\$1,005,940.00	\$309.52	\$154.76

New cost with same number of inspections

\$2,213,236.50

\$680.60

\$337.26 \$1,096,095.00 inspections

IMPROVED PROCESS

Inspection time reduced will increase the number of inspections completed per year.  
Enter Inspection Data (4 hours)

	0	6300	0	6300	0	36.5	
	26000					36.5	\$948,000.00 ***

Total savings based on same number of inspections

Total Reviewer and Supervisor for 1 Insp.

26000

\$1,005,940.00 \*\*\*  
\$1,954,940.00

\$1,117,141.50 inspections

\* This cost does not include mileage which would be an additional savings.

Staff will not have to travel to the office to get their directions, schedule and information to perform the interview/inspection.

\*\* Staff will not have to print the background reports as they will be available on the mobile device.

This will save printing costs as well as time estimated at 10 minutes per 50 page report.

\*\*\* For purposes of this report, the cost was kept the same; Cost of Living and AI's are not included.

Twice the inspections could be done for the same cost, less printing.

C. **Summary.**

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

DDS plans to redesign the Quality of Services Review (QSR) application to enable new business and functional requirements. The direction is to create generic presentation templates to modernize the process of scheduling, performing inspections, and entering information into electronic devices that are cordless, mobile and always connected to the internet (smart device).

The current application was implemented by a former consultant, it has undergone significant modifications for updated business requirements by the DDS business and programming teams. The Department of Developmental Services is a Health and Human Services agency focusing on Consumers who are deemed eligible, the Services they require, and the business contracts for Providers of those services. The agency mission is to include "People and Families First". DDS employs 3,600 people and its contracted providers employ approximately 16,000 workers. Overall operating expenses have increased from \$938M in fiscal year 2008 to \$1B in fiscal year 2012. During those same fiscal years, the federal Medicaid funding returned to the General Fund has grown from \$332M to \$515M. A major data source for the Medicaid Revenue reimbursements is the QSR Waiver Assurance Indicator Report. The QSR application data is also being used for other regulatory reports and, as the requirements have evolved, it has become apparent that information gathering and security administration should be much more efficient and timely.

**Purpose – Describe the purpose of the project**

The purpose of the project is to modernize the workflow process and the computerized application of the Quality Service Review inspection system. QSR Reviews are comprised of indicators representing information to be evaluated for DDS Public and Private Facilities and DDS Consumer experience. Reviews and follow-up schedules need to be automated. Review data needs to be readily available for the various roles involved with the consumers, services and providers. Waiver assurances for medicaid revenue reimbursements need to be easily produced, at regular intervals, with flexibility for administrative changes to increase reimbursement opportunities.

(Division staff conduct on-site reviews, using the Quality Service Review (QSR) process and Community Living Arrangements (CLA) and Community Training Home (CTH) Licensing Regulations to ensure compliance with state and federal regulations, the department's policies and procedures and the requirements of the Centers for Medicare and Medicaid Services (CMS) regarding Connecticut's Home and Community Based and Individual and Family Support Waivers. Information gathered by the Division is shared with other stakeholders as a basis for quality improvement initiatives, so that agreed-upon best practices can be implemented statewide.)

**Importance – Describe why this project is important**

This project is important because The Department of Developmental Services FIVE YEAR PLAN Goals for 2012-2017 include five stated goals for Quality Services and Supports:

- Redesign the Quality Service Review, incorporating input from both the public and private sectors, and increasing family and consumer involvement.
- Redesign the Continuous Improvement process, incorporating consumer reviews.
- Do more with less by streamlining processes to eliminate redundant paperwork and make process electronic where possible. *Measurement criteria to be established.*
- Find valid ways to make information on provider quality available to individuals, families and the general public. *Measurement criteria to be established.*
- Ensure consistency in processes across the three regions. *Measurement criteria to be established.*

(Quality Management Services, in conjunction with Resource Management, evaluates and issues the departments Provider Certification. Provider Certification is defined as the written authorization issued by the Commissioner to a qualified provider to deliver support services to individuals. Certification is achieved and maintained by the

qualified provider by participating in and meeting the expectations of the department's quality system in the area of level of care determinations, individual plans and service delivery, outcome achievement, provider qualifications, individual's health and welfare, compliance with financial requirements, and implementing quality improvement plans to address issues identified by department staff or the provider organization.)

**Outcomes – What are the expected outcomes of this project**

- Increase the efficiency of the quality review data collection, evaluation, corrective action and follow-up process.

Approximately 2,970 CLA citations issued during the 2012 fiscal year.

Approximate # of CTH citations is unknown at this time.

Approximately 7,980 instances of "Not Met" QSR findings that require a Corrective Action Plan" were found in fiscal year 2012. These findings are associated to the CMS Waiver Assurances and they are required to be corrected.

- Enhance collaboration and timeliness by building in a shared scheduling component.

Currently, a CLA licensee shall submit a current annual licensing application packet at least 30 days prior to the anniversary date of initial licensure and annually thereafter.

In CTH's, at least 45 days prior to the expiration date of a license the department will notify the licensee to initiate renewal of a license if the licensee wishes to continue to conduct or maintain a residence.

Currently, in QSR's there is no renewal process, though there has been talk of Certifying providers.

- Leverage geographic proximity by building in a mapping component so that the review locations and directions to them are readily illustrated.

870 Licensed Community Living Arrangements (CLA's). Usually licensed every 2 years. If there are performance issues, the CLA may be granted a 1 year license. Additional quality monitor reviews may be conducted on an as needed basis.

308 Licensed Community Training Homes (CTH's). Licensed annually.

We are estimating that there will be approximately 1,500 QM QSR reviews completed for the fiscal year 2013. Approximately 975 are part of the CMS waiver reviews. These numbers vary from year to year.

- Build a foundation for secure web access to individual information for families and responsible parties.

Enable QSR to fall within the DDS Gateway

- Add to the choices of electronic device formats that can be used to access review information, reports and dashboard summaries.

Re-design the Admin Grid to enable QSR to be more flexible and adaptable to accommodating different Service Types as they come up and are discarded. This will be essential as we move into the IP6 and the array of waiver services.

Modify QSR to improve the ability of an interviewer to navigate to the specific QSR Indicator they need to rate. Without this, utilization of mobile devices will be limited.

Improve access, reporting and analytics of QSR information for QSR Reviewers, Providers, DDS Staff and Families. This will include allowing access to the gateway by consumers and families to review their information.

Create functionality to record changes in QSR Indicators, Outcomes and Focus Areas so as changes are made (additions and inactivation's) past reviews and reports reflect the reviewable "entities" active at the time of the review.

- Reduce the time and extra hourly travel costs associated with the mobile workforce having to make visits to office drop-in centers to complete data entry.

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

Evaluation will include:

- Statistics for a daily rollup of the number of inspections or reviews performed.
- Number of plans of correction that resulted and are pending.
- Projections of the number of hours to be allocated for follow up visits during enhanced monitoring to meet the regulatory requirements.
- Scheduling of reminders for numerous milestones related to the review and licensing process.
- Qualified Provider reports will be produced immediately with current data.
- Surveys of Quality Monitors who collaborated on the new design are positive and enthusiastic.
- Surveys of Providers who collaborated on the new design acknowledge that their contributions have produced positive results.
- Surveys of Individuals and Families who collaborated on the new design respond that the the goal of getting timely information to determine the quality of various service providers has become a reality.

Quality Monitors will have a quicker and more efficient method to report inspection data. The Quality Monitors will be able to perform more on-site inspections and reduce travel to regional offices.

Inspection schedules, reminders and plan of correction follow-up are among the basic metrics for evaluation. The number of inspections completed the timeliness of reporting of citations and plans of correction being accepted will be ready for immediate analysis as opposed to the current method of analysis and reporting.

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
Enhancements to DDS Initial Standards 17a-227-10 for Licensing a CLA, Community Living Arrangement, have been submitted. Anticipate 100% acceptance by Q4-FY13.	FY12-13	The QSR application has been modified to include additional indicators that will inform the regulation compliance standards. Reports for quality inspections, monitoring and action plan coordination are being developed. The new regulations have not been formalized so enhancement project is within acceptable timeline. This effort does not accommodate the workflow that is being discussed as the next logical enhancement nor does it include the new security model.	Regulations will be accepted. Application enhancements will be promoted to production and user training will be completed. Statistics will be requested when the new indicator data has populated the application. Business requirements will be added to the application again, this time to include standardized DDS Web Application integrated role-based security and intuitive workflow for the quality monitoring process. Ever increasing reliance on the data this application contains as the source of diverse queries and measures of success.
Quality Service Review Application is redesigned to meet enhanced business requirements and modified to include workflow features made possible by creating a version of the app compatible with smart device format. Data	FY14-15	Goal Number 14 for the DDS Five Year Plan 2012-2017 "Redesign the Quality Service Review, incorporating input from both the public and private sectors, and increasing family and consumer involvement". Some of the data used for the monitoring and	New QSR system meets the needs of the business, consumers and providers. Application redesigned with features for measurement of specific goals with a built-in polling and comment screen to attain instant feedback by users according to their role. Data is 100%

is converted from existing applications into 100% SQL format.		reporting process is not in a SQL database so it needs to be integrated into the design.	contained in secure SQL tables.																																								
Design the application architecture to provide a user experience that maintains a sophisticated level of personal computing and enhances the range of what and where applications can be used.	FY13-14	DDS is now working with a consultant to create the first version of smart-device query and reporting application. Software 'clients' or, as they are referred to on smart devices; 'apps' are being enabled on the smart devices.	Collaboration proves successful , the QSR redesign DDS continues with other projects that use the presentation model to integrate the business systems and convert data from disparate systems.																																								
Replace Quality Monitor laptops with iPads or other smart-device standard.	FY14-15	<p>Thirty Quality Review Specialists use 5 year old laptops with vpn and air cards for internet service.</p> <p>Replacement options cost:</p> <table border="1"> <tr> <td>Funding</td> <td>Device</td> <td>\$ Cost</td> <td>x Qty</td> <td>30</td> </tr> <tr> <td>CE</td> <td>Laptop</td> <td>1262.00</td> <td>37,860</td> <td></td> </tr> <tr> <td>OE :Annual</td> <td>VPN</td> <td>7.00</td> <td>2,250</td> <td></td> </tr> <tr> <td>OE:Annual</td> <td>AirCard</td> <td>40.00</td> <td>14,400</td> <td></td> </tr> <tr> <td colspan="3">Total</td> <td>54,780</td> <td></td> </tr> <tr> <td>CE</td> <td>iPAD</td> <td>730.00</td> <td>21,900</td> <td></td> </tr> <tr> <td>OE :Annual</td> <td>3GB</td> <td>30.00</td> <td>10,796</td> <td></td> </tr> <tr> <td colspan="3">Total</td> <td>32,696</td> <td></td> </tr> </table> <p>Savings of iPad over Laptop is  CE \$5,960 and OE:Annual \$6,155  Total savings 30 devices \$12,115</p>	Funding	Device	\$ Cost	x Qty	30	CE	Laptop	1262.00	37,860		OE :Annual	VPN	7.00	2,250		OE:Annual	AirCard	40.00	14,400		Total			54,780		CE	iPAD	730.00	21,900		OE :Annual	3GB	30.00	10,796		Total			32,696		<p>After initial training of 3 months, the Quality Review Specialists will increase productivity by 50% with real-time entry of inspections, reporting and scheduling.</p> <p>Providers benefit with ability to use their own devices to receive notifications, respond to action plans and inspection schedules.</p> <p>Families and individuals use their own devices to input or research information about services .</p>
Funding	Device	\$ Cost	x Qty	30																																							
CE	Laptop	1262.00	37,860																																								
OE :Annual	VPN	7.00	2,250																																								
OE:Annual	AirCard	40.00	14,400																																								
Total			54,780																																								
CE	iPAD	730.00	21,900																																								
OE :Annual	3GB	30.00	10,796																																								
Total			32,696																																								

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
Use a systems development lifecycle process to incorporate the QSR application web interface into DDSGateway. DDSGateway was designed in 2008 to incorporate user self-administration and interaction with multiple DDS web applications within a single sign on process. It has a secure automated password reset feature for external users.	FY13-14
Application Developers attain proficiency in the development of smart device application design by writing services that can be reused across any agency that requires an inspection application used by mobile workers.	FY14-15
Replace 30 laptops with smart devices.	FY14-15

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	<ol style="list-style-type: none"> <li><b>User-friendly and efficient for citizens:</b> Quality Service Review is the tool for monitoring DDS private and public facilities, consumer experience and regulatory compliance.</li> <li><b>Information and services available and easy to find on-line:</b></li> </ol>

		<p>DDS Gateway role based security is a scalable secure entry point for all web based applications DDS authorizes.</p> <ol style="list-style-type: none"> <li>3. <b>Efficient, modern business practices:</b> Service reviews 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 application will be written with code called ‘services’ that can be reused across any agency that requires a web based inspection application used by mobile workers, including mapping, photos and scheduling.</li> <li>4. <b>Increased transparency for public and private policy makers:</b> 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.</li> <li>5. <b>Reduce costs to the state regarding implementation:</b> DDS is ready to see a well-rounded technology advancement plan take shape. Devices are smarter, networks are more agile, support of user computer desktops can be virtualized, and office space can be reduced to accommodate mobile workers.</li> <li>6. <b>Implement systems needed in support of health care reform:</b> 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 QSR system touches the lives and locations of DDS consumers, evaluating health, safety, employment and quality of life for consumers and their supports.</li> <li>7. <b>Ensure the appropriate confidentiality, integrity and availability:</b> 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.</li> </ol>
Is this project aligned with business and IT goals of your agency?	Yes	<p>“The state needs to do more with less: Opportunities to assure that we have the analytic capacity to review data and act on trends. To manage systems based on performance data we need to find more ways to keep canvassing the experiences of individuals and families.”</p> <p>“There is a Need for Greater Transparency: Opportunities to Use multiple outlets to disseminate information including the web, consumer friendly alters, etc.” DDS Five Year Plan; Page 16-17</p>
Does this project reduce or prevent future increases to the agency’s operating budget?	Yes	<p>Operating budget reductions include excess payments of hourly wages and mileage expenses for unnecessary visits to regional offices. Preventing of increased office space and desktop computers. This is being evaluated by the QM Team also.</p>
Will this project result in shared capabilities?	Yes	<p>The framework of the application will be adaptable to reviews or inspections throughout state agencies. The mobile workforce will promote acceptance of new tools that solve business issues and requirements. User roles will branch out to include business</p>

		intelligence, training, scheduling and special interest group collaboration.
Is this project being Co-developed through participation of multiple agencies?	Yes	DDS is collaborating with Providers and Self-Advocates to get business requirements. DDS works with BEST App Hosting, Database and Network Services groups.
Has the agency demonstrated readiness to manage project of this size and scope?	Yes	The Quality Service Review System Team has been meeting with the IT Team on a weekly basis for over 15 months therefore the relationships and ability to relay business requirements are mature. The QM team is prepared to work through the system development lifecycle process with detailed requirements to reach new technology and analytical goals for the application, therefore furthering the agency mission. The agency is capable of managing large scale network upgrades, has their own regional servers for anti-virus and windows update repositories, and maintains a 'parallel to production' three-tier development environment housed at the Hartford Regional Center. The application development team has successfully implemented several web-based applications using BEST architectural standards and an innovative role-based security model.
Is the agency ready to deliver the business value proposed?	Yes	Commissioner Macy made this statement within his Five Year Plan update April 2012: ..." While there is much interest on the part of DDS and private sector staff in getting to work on the goals, we must use our relatively fragile resources wisely and address goals collectively and systematically. We are very excited with the widespread level of interest in our plan and know that the ultimate results will be both highly regarded and truly responsive to people's needs as they will reflect the input of so many motivated stakeholders."

G. **Organizational Preparedness.** Is your agency prepared to undertake this project? Are 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?

DDS is prepared to undertake the project as part of their mission. Senior management understands the value and necessity of this project and is willing to allocate staff participation. The state system development methodology model will be used to manage and govern the project. Key decisions will be discussed at regular meetings so the project steering committee will be informed and decisive.

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 of 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?

The business requirements will be formalized in approximately 3 months (\$40,320 business analyst or 12% of total consulting cost). The IT Manager has taken the lead as project manager. A number of smart devices are in use at the agency by the executive leadership team. A proof of concept secure wireless network has been constructed at the central office location. Consultants are currently working with DDS who know the business and have the expertise to develop the smart application.

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?

Yes, DDS has experienced staff with the proper training to maintain the infrastructure; the application system will be hosted at DAS BEST. DDS does not anticipate the need to hire additional staff. Training and device support will be provided by DDS IT Staff.

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
	\$363,180		\$112,3102	\$624,324

**Explanation of Estimates**

Capital Funds Consultant: 2 Software Engineers for 1 year at 240 days = 480 days x 700.00/day = \$336,000  
 Apple Support \$2,790 + 3G Service 10,800 = \$13,590 x two years = \$27,180

**CURRENT PROCESS**

Activities Involved in Inspection Process	Total number of pages	Number of reports	Cost 325 reams	Hours Used	Reams of paper	Wages	Cost of Activity	Single cost of each inspection now	Single cost after implementation
Getting Directions									
Printing Costs for Directions									
Travel 1 hour each way				6300		36.5	\$237,230.00 *	\$73.00	\$36.50
Printing background reports (30) pages	162300	3250	1300		325		\$1,300.00 **		\$0.00
Report printing time 10 minutes per report	32500			541 hours		36.5	\$19,746.50 **	\$6.08	\$0.00
Enter Inspection Data (8 hours)				26000			\$949,000.00	\$292.00	\$146.00
Total Reviewer and Supervisor for 1 insp.				26000		38.69	\$1,005,940.00	\$309.52	\$154.76
							\$2,213,236.50	\$680.60	\$337.26

**IMPROVED PROCESS**

Inspection time reduced will increase the number of inspections completed per year.		0	6300	0	6300	0	36.5		
Enter Inspection Data (4 hours)	26000						\$949,000.00 ***		
Total Reviewer and Supervisor for 1 Insp.	26000						\$1,005,940.00 ***		
							\$1,954,940.00		

\* This cost does not include mileage which would be an additional savings.  
 \*\* Staff will not have to print the background reports as they will be available on the mobile device.  
 \*\*\* For purposes of this report, the cost was kept the same; Cost of Living and AI's are not included.

Staff will not have to travel to the office to get their directions, schedule and information to perform the interview/inspection.  
 This will save printing costs as well as time estimated at 10 minutes per 30 page report.  
 Twice the inspections could be done for the same cost, less printing.

New cost with same number of inspections

Total savings based on same number of inspections

**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.

<b>(1) Impact Area (Vision)</b>	<b>Description of Project Impact</b>
Will this project provide efficient and easily accessible services for all constituents?	Yes, the global security model will accommodate roles for constituents, consumers, families, service providers; also agency staff and administrative access levels.
Will this project promote open and transparent government with the citizens of the state?	Yes, information will be entered and verified by the parties involved during the inspections, not subject to paper notes, transcription inaccuracies and data entry errors.
Will this project establish efficient and modern business processes?	Yes, the inspection, review, mapping and scheduling services on the smart device can be a replicated for agencies in need of an online, immediate review application.
Will this project increase accuracy and timeliness of data for policy making, service delivery and results evaluation?	Yes, accuracy and timeliness of data will be increased for policy making because this project is an opportunity to integrate disparate systems and align existing legitimate databases. Service delivery is the heart of this application; therefore prediction and prevention are of utmost importance. Results evaluation will mature as more experiences can be combined into meaningful real life examples of success.

**2) What is the expected impact of NOT doing this project?**

The Quality Service Review System will continue to need constant enhancements, by DDS developers, to meet the business requirements of the regulatory environment, waiver assurance management and ad-hoc queries. The dual maintenance of security rights will continue to be time consuming and a duplication of efforts. DDS will be delayed in expanding their application suite with new technology features so the eventual replacement of the 300 Case Management laptops would cost the state over \$378,600. The future CE expenditure to replace laptops will be \$159,600 above the iPADS Solution. Annual operating expenses for the laptops are \$169,300 but for iPADS \$108,000, therefore costing the state \$61,200. The Agency, our business associates, and those they serve, will suffer from delays and lack of confidence in our inability to meet goals of the Mission as stated in the 5-year plan.

**(3) How will you demonstrate achievement of benefits?**

System design will include (but not limited to) automated schedules and reminders activities related to QSR inspections, licensing, provider staff training:

QSR Licensing Regulations Schedule	Document	Activity	Interval	Notification
Initial Certification	Written authorization issued by the Commissioner to a qualified provider.	Add to Qualified Provider list.	As of July 1.	According to current and future service types.
Next regional performance review - annually	RPPRCC Regional Performance Review Certification checklist	Achieved expectations  Conditional Status for enhanced monitoring	Certified  For a minimum of 30 days	In writing to provider

		Conditional Certification		
Inspection 17a-227-04	QSR	Perform inspection	Initial licensure	
		Department shall provide summary.	15 days from completion	Written summary of citations
	Inspection	Perform inspection	<= 2 years	Written summary
Plans of Correction 17a-227-05	15 days from receipt of summary	Written plan of correction	15 days	Plan of correction
	10 working days from plan of correction	Department reviews plan of correction and accepts or responds with rationale for not accepting poc.	10 days	Plan not accepted
Provider to document a request for waiver	must be in writing	needs date specified		Application in writing
Department accepts or denies waiver request - notifies provider.	10 working days		10 days	
Annual License Renewal 17a-227-06	30 days before renewal	Licensee submits application packet >4 residents = \$50 fee	335 days	Reminder
Compliance orders 17a-227-07	30 days of issuance			Certified Letter
Request for hearing on license 17a-227-9		needs date specified		
STAFF DEVELOPMENT 17a-227-14	within 30 days of hire every 2 years	Direct contact personnel orientation and training on 5 critical skills. Refresher class	Schedule	Verification Reminder
	within 180 of hire days every 2 years	Direct contact personnel complete in-service training. Refresher class	Schedule	Verification Reminder
Transfer of Individual 17a-227-20	Policies and Procedures in place	Must be in accordance with provisions of Sec. 17a-210 CGS		Discharge Plan

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

(1) Statutory / Regulatory Mandates:

Impact of non-compliance to the regulations ranges from lack of consumer confidence to steep monetary sanctions.

CLA Licensing Regulations 17a-227-01 – 17a-227-22

<http://www.ct.gov/dds/cwp/view.asp?a=2839&q=331634>

CTH Licensing Regulations 17a-227-23 – 17a-227-30

<http://www.ct.gov/dds/cwp/view.asp?a=2839&q=379130>

<http://www.justice.gov/crt/about/drs/>

The [federal] Disability Rights Section works to achieve equal opportunity for people with disabilities in the United States by implementing the Americans with Disabilities Act (ADA). Through its multi-faceted approach toward achieving compliance with the ADA, this Section works to make this goal a reality. The Section's enforcement, certification, regulatory, coordination, and technical assistance activities, required by the ADA, combined with an innovative mediation program and a technical assistance grant program, provide a cost-effective and dynamic approach for carrying out the ADA's mandates. The Section also carries out responsibilities under Sections 504 and 508 of the Rehabilitation Act, the Small Business Regulatory Enforcement Fairness Act, and Executive Order 12250.

Section activities affect six million businesses and non-profit agencies, 80,000 units of state and local government, 49 million people with disabilities, and over 100 Federal agencies and commissions in the Executive Branch.

<http://www.justice.gov/crt/about/cor/byagency/eo12250.php>

Executive Order 12250 Leadership and Coordination of Nondiscrimination Laws November 2, 1980

[http://www.justice.gov/crt/about/hce/final8\\_1.php](http://www.justice.gov/crt/about/hce/final8_1.php)

The [federal] Fair Housing Act prohibits a broad range of practices that discriminate against individuals on the basis of race, color, religion, sex, national origin, familial status, and disability. The great majority of group homes for persons with disabilities are subject to state regulations intended to protect the health and safety of their residents. The Department of Justice and HUD believe, as do responsible group home operators, that such licensing schemes are necessary and legitimate. ... Regulation and licensing requirements for group homes are themselves subject to scrutiny under the Fair Housing Act. Such requirements based on health and safety concerns can be discriminatory themselves or may be cited sometimes to disguise discriminatory motives behind attempts to exclude group homes from a community. Regulators must also recognize that not all individuals with disabilities living in group home settings desire or need the same level of services or protection. For example, it may be appropriate to require heightened fire safety measures in a group home for people who are unable to move about without assistance. But for another group of persons with disabilities who do not desire or need such assistance, it would not be appropriate to require fire safety measures beyond those normally imposed on the size and type of residential building involved.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104-191, was enacted on August 21, 1996.

(2) Impact of non-compliance:

<http://www.ct.gov/dds/cwp/view.asp?a=2042&q=391342>

HIPAA Privacy Rule

HIPAA Security Rule Regulations for Confidentiality, Integrity and Availability of electronic protected healthcare information.

Risk of inability to assure the confidentiality, integrity and availability of consumer electronic protected healthcare information; the most compelling risk is inability to get immediate access to healthcare requirements for example, dietary or medication information. Another risk is integrity in terms of the consumer location changes being recorded immediately in case of emergency.

**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?

Citizens:

- Citizens will benefit from taxpayer savings while DDS cuts unnecessary mileage for Quality Monitoring.
- Citizens will benefit from taxpayer savings when DDS reduces the cost of devices used for Quality Monitoring.
- Citizens who are responsible for consumers will be able to register to use the system to monitor their consumer, update emergency contact information, and get bulletins on services or provider status.

Staff in our agency:

- Executive Leadership will have a business intelligence dashboard of meaningful statistics.
- Supervisors will share the ability to create adhoc reports for inquiries about reviews, consumers and providers.
- Scheduling flexibility for QSR Reviewers to use apps for mapping travel to destinations while they are performing unannounced visits; this will increase the number of inspections that can be performed throughout the regions.
- QSR Reviewers will be able to enter and update inspection information immediately on the device.
- Case Managers will be able to inform Providers that a service location needs to be associated.
- Case Managers will have more thorough information for the Individual Plan of a consumer.
- Produce training videos for new staff and providers that will be used to reinforce the business purpose and workflow of the quality inspection process.
- Publish updated training for providers to use when new staff is hired.

Other Stakeholders:

- By redesigning the application we collect and report on what programs are working well for consumers so quality of life is enhanced and tracked throughout their affiliation with DDS and service providers.
- By redesigning the application to provide more thorough query capability, DDS and their business associates will reduce the amount of time needed to compile and investigate conflicting information relating to inspections, interpretations and corrective action plans.
- By redesigning the application to provide more thorough data associations, DDS will have up-to-date information related to individual consumers.
- By redesigning the application for more scheduling details, both DDS and the business associates will have a clear picture of what reviews are scheduled, who is responsible for the outcomes, how many corrective action plans are accepted, and where specific goals are being measured and met.

Other Agencies:

- Standard web services for smart devices can be shared and reused for development of agency specific inspection indicator applications to increase efficiency of the mobile workforce.
- The web application three-tier architecture model is a robust, scalable and secure technology that should be leveraged by agencies to engage with the enterprise hosted systems at BEST. The platforms provide an excellent service level and are fully engaged with backup and recovery services.