The SDC Enablement Services Program

The Enablement Services Program provides options — baseline, silver and gold service categories for the five offerings — to help you (i.e. project owner, data provider, or data analyst) optimize use of the Secure Data Commons (SDC). This program ensures that your project team has access to the necessary skills, support and security to successfully use the SDC to achieve your analytical and business goals.

There are five offerings available, with three services categories (baseline, silver, gold). Each project starts with baseline included for each offering, as part of the cost of using the SDC. Projects may upgrade to silver or gold for each offering at any time for additional assistance and guidance. Price for silver and gold varies for each offering.

To make a new selection or to change your existing service categories for the program offerings, please contact the SDC support team (sdc-support@dot.gov) and an enablement representative will assist you through the process.

Project Onboarding and Training — Personal guidance and coaching on how your project team can use the SDC

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Overview web session with your team	The SDC team will conduct one, 2-hour web-based interactive session with you and your project team members, including data analysts, data providers, and others supporting the project. In this session, we will: • Provide an overview of the SDC vision and purpose, including phases of the project lifecycle and technical aspects. • Help you and the project team understand how the SDC can help you achieve your business goals at an accelerated pace. • Answer any questions you may have about the SDC and its capabilities.	✓	✓	✓

Documentation and training materials	We will provide you and the project team access to a variety of SDC documents and training materials.
	
	These include:
	• An SDC demo video that provides an overview of the SDC platform and key project lifecycle phases:
	    o Planning
	    o Onboarding
		✓	✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
	o Active o Export o Retirement • Standard Operating Procedures (SOPs) related to data access on the SDC, onboarding, data exports, and more. These SOPs are for all the project team members (project owner, data analysts, and data providers) to help ensure their success on the SDC platform. • Training videos and presentations for onboarding your data analysts and operating workstations within the environment. • User guides for data analysts and data providers. These documents and materials will make you more familiar with the SDC platform, its features and enhance your user experience within the SDC.			
Single session about business needs and costs	We will conduct one, 2-hour web-based specialized session with you to improve your understanding of what it means to manage a project within the SDC environment. This session will give you: • Better understanding of costs involved in using the SDC for your project, including the cost implications of changing the ESPO service categories. • Increase awareness and knowledge of the different phases of a project lifecycle, as well as costs associated with each phase, such as cloud consumption, analyst workstations, infrastructure, and support. • Better preparation for covering anticipated costs, and recognition of the benefits and business value that the SDC brings to your project. • Provide guidance to the project owner on how to access the project cost and usage • Answers to any questions you may have.	✓	✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Project pre-planning assessment report	We will conduct up to two, 1-hour web-based working sessions with you to gain a better understanding of the business goals you are trying to achieve. We will explain how the SDC can potentially address your business goals and provide recommendations on what kind of team you would need to assemble. During the working sessions, we will collaborate with you to identify project challenges, needs, and goals, and follow up with an assessment report. The report will provide: • A viability assessment to identify whether the SDC is suited to accomplish your project objectives and business outcomes. • An overall evaluation of your project needs, business goals, and technical skills that you will need to be successful within the SDC environment. • A crosswalk evaluation that maps the project needs and expected outcomes with the SDC platform capabilities. A gap analysis and further recommendations		✓	✓
Multiple sessions to estimate and refine project costs	We will conduct two, 2-hour web-based working sessions with you to explain and discuss in more detail these topics: • In-depth walk-through of cost estimations. • How various aspects of the platform relate to and accomplish your business goals. • The cost drivers involved and how they relate to various aspects of the SDC. • Refining cost estimations and projections for your active engagements to be able to forecast and budget accurately.		✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
In-person onboarding support	We will provide a variety of activities to help your team integrate into the SDC environment successfully and to shorten the timelines associated with onboarding your initiative on the SDC. These activities include: • Conducting one pre-planning web-based meeting (up to 4 hours) with you and your team to get a deeper understanding of your needs and challenges. • Coordinating a 1-day, in-person onboarding working session for your team. • Discussing any concerns that you may have related to the SDC in the context of your needs and business goals. As a result of this in-person interaction with your project team—the project owner, data analysts, research analysts, data providers, and others—we will gain deeper understanding of your specific use-cases and user roles that will allow us to better support your team going forward.			✓
2-day training with your team	We will conduct an onsite, in-person, 2-day working and training session with your project team. • Planning for this in-person session will require at least 2 weeks' advance notice. • This in-person facilitated session is recommended for maximum benefit and support. • This in-person session will be conducted at the client site unless there are any logistical challenges that will prevent it from happening (such as - building access or security, lack of proper audio/video facilities, or cost of travel). If in-person facilitation is not possible, we will provide a web-based, 2-day working and training			✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
	session. Planning for this web-based session will begin at least 2 to 3 business days in advance. Both in-person and web-based sessions will provide a combination of resources depending on the project's size and your needs. The combined training and working sessions also will help shorten the time between the onboarding and active phases. The 2-day sessions will include: • Training that is customized to your project sample data so that activities are relevant to the team's user experience. • Training on how to effectively work with SDC technical subject matter experts (SMEs) that will be available to the team when they work in the SDC. • The opportunity for data analysts and others to learn based on their own use-cases. • A head-start on your project's analytical tasks using the SDC platform. Topics selected to be covered as part of the 2-day training/working session for up to 10 people will be based on the project pre-planning assessment report and consultation with you.			

Uploading Data — Working with data providers to upload data into theSDC, regardless of the size

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Process setup, provide user guide for secure upload	We will help you set up your data provider's end-to-end data load process. Setup will entail loading data into the data lake or data warehouse, and real-time and batch data ingests. We will assist with simple data transformations such as loading Comma-Separated Values (CSV) files into the data lake or data warehouse. We will provide: • Training documents for data providers on the SDC data load process. • Example data scripts for data-loading in the SDC (cheat sheets and online training materials) via the public website and Confluence collaboration pages.	✓	✓	✓
Refinement or development of your external scripts	We will develop custom command-line scripts to automate real-time and batch data ingests for your project's data providers. Our team will also provide the following services related to the data load process: • Assist with any data loads needed from sources external to the SDC but within your data provider's scope and boundary. • Assist with optimizing the data loaded from your data provider to cloud storage (S3 buckets). • Share examples of loading scripts using your data provider's dataset that can be used as templates.		✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Building metadata and data dictionaries for your project	• Twice a year, we will collaborate with your data providers to help define and document metadata and data dictionaries for your datasets. • We will review the documents with you to make sure they are accurate and clearly understood by the project team. This review will occur in an hour-long, web-based meeting. We will follow up via another meeting, if necessary. • All documents will be made available to your team via a web portal and/or relevant Confluence. • We will provide answers to any questions you may have related to the documentation			✓
Software development for automating data update	• We will develop custom programmatic tools and Application Programming Interface (API) to optimize throughput for any data load needed from external sources into the SDC, but within your data provider's scope. • Our experts will introduce and train your team on topics related to advanced automation. They will use Python, Java, or other programming languages to help with automated ingestion of the data into the SDC. • We will help set up the lambda functions to acquire your data from an API endpoint and put it into SDC cloud storage (S3 bucket). • We will handle up to two requests per year for developing tools/software to assist with data loads. Automating tasks for your data load process will require more discovery, more effort, more lines of code, and specialized tooling for data preparation and automation. But the result will be efficiency that adds value to your project.			✓

Data Cleanup — Support to ensure quality, performance, and reliability of your data entering the SDC

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Setting up data for easy queries	We will provide data cleansing and data transformation support, as needed, to make sure that your datasets in the SDC are clean and easier to query and interpret. Support will include: • Applying transformation to data formats such as CSV files and JSON files with simple to traverse schemas (tables). • Defining, configuring, and executing quality assurance (QA) validation and verification functions for your datasets to ensure that data are ingested accurately and completely. • Standardizing data into uniform formats for querying by analysts.	✓	✓	✓
Making complex datasets available to query	We will provide you and your project team insight into the steps involved in managing complex datasets. This includes: • Helping your team define, configure, and execute quality assurance processes and procedures for more complex data formats (such as deeply nested JSON files) to improve data quality when making it available for querying and interpretation. • Helping you document these configuration steps for your project and make this documentation available to your team.		✓	✓
Error detection and reporting during data upload	We will develop automated quality assurance functions and notifications to verify conformance of your data to published schemas (tables). Our support will include: • Help setting up and configuring all underlying infrastructure for your project. • Help with triage and management of erroneous, duplicate records as part of the data load. • Providing you a daily automated report about your uploaded datasets, any detected errors, and other supporting information. • Assist you in examining the data to see what can be done to improve its quality.			✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Building automated tools to fix errors for the upload process	We will develop an automated data quality improvement tool specific to your project needs. • The tool will help address issues that happen during the ingest process. (e.g. data formatting issue, data type issues etc.) • The tool will help not only to detect data quality errors but to fix them for every data upload. Results of error detection and overall tool execution will be included with your daily report.			✓

Analyst Setup and Collaboration — Help to organize and improve your analyst's research capabilities while using the SDC

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Analyst workstations that come with standard tools	We will perform the following technical assistance activities: • Assist you and the project team in providing user accounts, setting up project-specific IT infrastructure (data storage buckets), and establishing standard operational workflows. • Setting up user workstations with the commonly used analytical tools and applications. • Setting up user collaboration environments to allow analysts to version-control the source code and contribute to virtual discussion forums. ○ This capability is enabled using a tool called "GitLab." • Enable data analysts to export data (table, figure, derived data) from SDC.	✓	✓	✓
Help with installation of approved open-source software	In addition to assisting with the set of pre-installed applications, our team will help install any open-source tools that are approved and that your project may require to do its tasks. We will help install open-source tools on demand at any time during the project lifecycle. Examples of such tools are PyHive, PyCharm, and others that are available for free. In addition to the open-source tools, we will load the approved licensed tools on the shared drive for users to install on their own workstations.	✓	✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Setting up collaboration tools based on individual needs	In addition to the setting up user collaboration environment and providing the standard documentation to you as part of our baseline support, we will perform customized configuration of GitLab source code versioning and collaboration environment for your project. This service includes: • Provisioning and configuration of GitLab specifically for your team members. • Providing recommendations on setting up management rules and administration roles. • Providing project-specific technical guidance on how to set up source code repositories, how to collaborate within the GitLab environment, and how to accomplish code-sharing.		✓	✓
Assist install of new analytical tools on the SDC	SDC team will provide technical expertise to help install new analytical tools, which are not part of the standard list of software available on the SDC platform. This support includes: • Custom installation on individual user (analyst) workstations. • Help with setting up proper licensing. • Help with initial usage of these analytical tools. • Tool-specific guidance to optimize the tool's use and capabilities. When Geographic Information System (GIS) applications are involved, we also will help your users create specific GIS infrastructure, load GIS files and datasets, and query those datasets within the environment.		✓	✓
Create custom analyst software, up to two per year	We will design and develop custom programmatic software tools to automate your analytical activities to help you accomplish your project objectives (e.g., building a specialized SQL Server library to help with analysis, or visualization of traffic patterns using R/Python/ GIS). To develop and deliver the software tools and ensure that they meet project needs, we will provide technical resources as well as support from our business analyst to engage and capture your requirements for custom software development.			✓

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	The scope and feasibility of a user request will be determined based on the detail review of the requirements with the SDC team and hours allocated to support this activity.			

Data Analysis Consulting — Tailored advice, including technical support and resources, to advance the performance of your models and analytical outputs

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Specific guidance on using SDC infrastructure	We will provide guidance and relevant documentation for your users on: • How to work effectively with the project-specific datasets. • How best to use the SDC infrastructure for performing data analyst tasks. • How to build and improve query performance and responsiveness by themselves.	✓	✓	✓
Regular consultations to review challenges and SDC updates	These sessions will enable us to: • Inform your team about ongoing tasks, issues, and challenges. • Share information on the new capabilities and tools being introduced to the SDC platform. • Communicate and discuss your priorities and ask questions on any challenges that your team is facing for which we can provide assistance. • Establish a trusting relationship between your project team and our dedicated enablement point of contact (POC). These regular engagement sessions will be held up-to biweekly, depending on the project phase or individual needs of the project team.		✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Database optimization for your project needs	We will work with your team to examine your data tables and queries and help your analysts to optimize their use of the SDC infrastructure. We will then update your specific dataset and table structure to assist in optimizing query performance. This will include creating an additional data table index, segregating data into smaller sets, customized data table partitioning, and other such activities as needed. We will support up to two requests per year for providing custom support to help optimize your dataset.		✓	✓
Reviewing and improving data scripts and queries	We will work with you and your data analysts to provide support and recommendations on optimizing analytical data scripts and queries by: • Reviewing your scripts and data queries and recommending updates for optimizing their functionality and improving their performance. • Helping create your project-specific datasets to better meet your needs. • Guiding your data analysts on how to build optimized datasets and construct data queries to improve their responsiveness.		✓	✓

SDC Service Offering Summary	Service Offering Details	Baseline Services (Included)	Silver Services ($)	Gold Services ($$)
Support to boost the performance of data analyst models	We will work with your team to optimize the performance of your models. Specifically, we will: • Conduct working sessions with your data analysts in order to identify performance bottlenecks that are resulting from modelling challenges or data structure. • Provide dedicated development support to design and define your data tables and optimize performance of your custom queries. • Assist your data analysts with tuning and implementation of your models and perform custom programming services to accomplish that. • Help build examples of optimized models and share those with the analysts for achieving their specific analytical tasks.			✓