NCS' RESPONSE

Stated Goal of the Challenge

"The goal of this challenge is to reimagine the taxpayer experience and design the taxpayer experience of the future. With over 200 data fields at play, how might we design, organize, and present tax information in a way that makes it easier for taxpayers to manage their taxpayer responsibilities, and to use their own taxpayer data to make informed and effective decisions about their personal finances."

Challenge entrants will submit a design that:

- Improves the visual layout and style of the information for the taxpayer.
- Makes it easier for a taxpayer to manage their taxpayer responsibilities.
- Empowers a taxpayer to make informed and effective decisions about their personal finances.
- Entrants should consider end users in developing their design. Our tax system includes people from many different socioeconomic backgrounds, with different needs and responsibilities.

The review panel will make selections based upon the following criteria:

- Overall Appeal - How does the entry feel visually?
- Taxpayer Usefulness - Does it address the taxpayer's responsibilities?
- Financial Capability - Does it make it easier for the taxpayer to make informed and effective decisions about their personal finances?
- Visual Hierarchy - Can the most important information be easily found
- Information Density - Is it easy to digest the information that is presented?
- Accessibility - Can a varied population make use of this document?

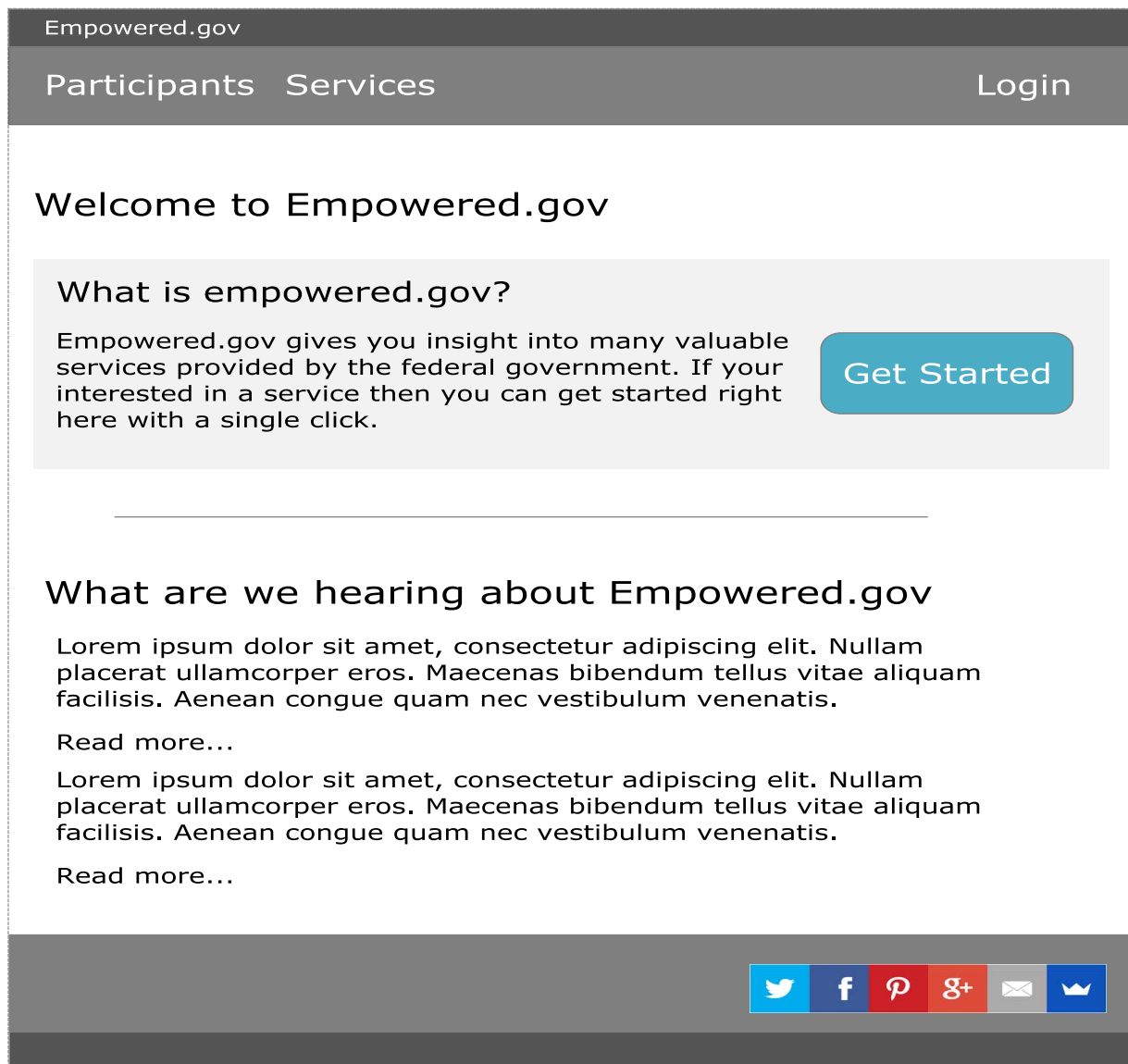| Challenge Goal	Achieved	Response
Improves visual layout	✓	No data, only requested information is presented
Taxpayer responsibilities	✓	TDD Tax Credit analysis (just one of many services)
Informed and effective decisions	✓	TDD data provides taxpayer with access to services
Socioeconomic backgrounds	✓	Modern, standards based, leverage all channels
Overall appeal	✓	Bootstrap standardizes delivery to all devices
Taxpayer usefulness	✓	Create a federal government services marketplace
Financial capability	✓	Improve lives through improved access to services
Visual hierarchy	✓	Bootstrap standards make everything look consistent
Information Density	✓	Enable the delivery of only actionable information
Accessibility	✓	Leverage Accessible Electronic Docs Comm. of Practice

Provide the taxpayer with a marketplace of federal government services to select from, **Key Concept:** all services take valuable insight from available TDD data items. The portal will guide the taxpayer through all available services allowing the taxpayer to select and submit service interest. Government agencies will immediately receive these service requests through a Restful API discussed below. The Restful API will securely deliver the service interest, contact information and formatted, purposeful TDD data.

Government services web-portal

NCS proposes a modern standards-based taxpayer facing web portal that aggregates an unlimited number of US federal government taxpayer services. **Key Concept:** The proposed web portal does not present any TDD data nor re-represent any taxpayer personal private information. This allows for modern, secure, highly accessible, user friendly, universally familiar authentication practices.

Web portal landing page – will leverage modern Html5, CSS3 and Bootstrap, all pages will adapt to any device any browser and load quickly and consistently. The site is a content managed site, meaning all content is managed through a proposed API discussed below. The site is fully Section 508 compliant.

Empowered.gov

Participants   Services   Login

Welcome to Empowered.gov

What is empowered.gov?

Empowered.gov gives you insight into many valuable services provided by the federal government. If your interested in a service then you can get started right here with a single click.

Get Started

What are we hearing about Empowered.gov

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Read more...

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Read more...

The Account Setup / Login page – the taxpayer can fully browse the site without creating an account or logging in. Once the taxpayer selects interested services, then account setup and authentication is required. Since no PII and TDD data is ever presented, authentication can be simple, secure, standards-based and can even leverage federated login services such as Google OpenID. **Key Concept:** The account details collected will be immediately compared to IRS IVES records (using the TDD API discussed below).

Key Concept: After submitting the service request(s), all subsequent communications between the taxpayer and the government service provider(s) will occur within the service provider's traditional channels.

Empowered.gov	
Participants Services	Login

Setup an account and get started!

Full Name: ?

SSN: ?
****

Full Address: ?

Date of birth: ?
MM / DD / YYYY

Next

Already have an account?

User Name:

Password:
****

Login   Forgot

OR

f Sign in with Facebook
y Sign in with Twitter
g+ Sign in with Google
g+ Sign in with Google

Possible TDD API authentication results: Successful or Failed

Account setup continued.   X

New user name (minimum 5 characters, use email address if available):

New password (minimum: 7 characters, 1 cap, 1 number, 1 non-alphanumeric):
****

Retype password:
****

Submit

Account setup continued.   X

The information provided does not match our records. Please include the most current information regarding name and address.

Close

Content managed services market place – all federal government departments and agencies can apply for access to and participate in the Services Marketplace. **Key Concept:** Through the proposed Services API (defined below), agencies will remotely administer all their content; add and modify all icons, images and text, defining their agency and related services. All site content will be 100% consistent and automatically formatted for any device any browser.

Participants managed content

Empowered.gov

Participants   Services   Account

What is Empowered.gov

Empowered.gov is a wonderful new service provided to all US taxpayers. Participation is free and will provide you with a starting point for understanding and possibly participating in all US Federal government programs and services that you the taxpayer may be able to participate in and benefit from.

Who is participating in Empowered.gov

This list changes frequently and you can be added to our periodic newsletter to keep you informed as changes are made.

Treasury Department   Social Security Administration

Veterans Affairs   Department of Agriculture

Department of Labor   Department of Health & Human Services

Services managed content

Empowered.gov

Participants   Services   Account

Services available at Empowered.gov

The services provided at Empowered.gov will work to accomplish one or both of the following goals:

- **Improve taxpayer personal and financial capabilities.**
- **Improve taxpayer access to available services.**

Examples of services:

This list changes frequently and you can be added to our periodic newsletter to keep you informed as changes are made.

myRA, Tax Credits   Social Security

Medical and other benefits   Farm services, SNAP

Employment, Assistance, Job Training   Patient Affordable Healthcare Act

Participant manage content

Empowered.gov

Participants   Services   Account

US Treasury Department

The Treasury Departments primary roles are relating to national dept, printing of money and other financial services. Specific to Empowered.gov, the department offers a service called myRA of which can enable taxpayers the ability to invest without the usual minimums and other red tape.

Available services:

This list changes frequently and you can be added to our periodic newsletter to keep you informed as changes are made.

myRA   Social Security

Earned Income Tax Credit

Service manage content

Empowered.gov

Participants   Services   Account

*my*RA:

Start saving with myRA, a new retirement savings account from the United States Department of the Treasury.

No cost or fees
No complicated investment options
No risk of losing money

Learn more   I am interested

Service submission – Once the taxpayer selects those services they are interested in; they can submit their interest directly to those service providers via the portal. The taxpayer is then asked to authenticate and once the TDD API returns a successful match, the taxpayer will be moved to the selected services page.

Empowered.gov

Participants   Services   Account

Welcome, Sally Smith   my contact details

Interested services:

myRA   status: submitted

Next

Interested services contact. Please provide as much information as possible.

Minimally one form of contact is required.

Email address:

Cell phone:

Other phone:

Next

Congratulations, your information has been successfully updated. Please allow up to two weeks for additional information to begin arriving.

Thank you for using Empowered.gov

If you provided an email address we can keep you updated on future services.

☐ Sign me up for the Empowered.gov news letter

Close

A graphic overview of the proposed solution is shown here:
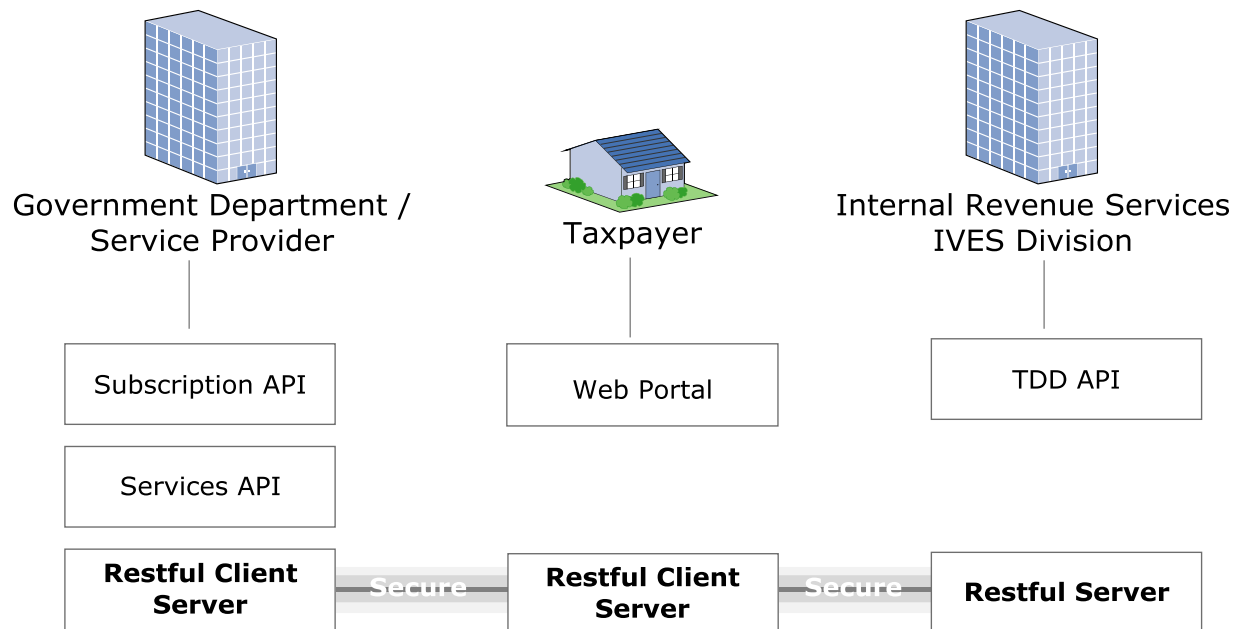
A description of the above graphic:

The taxpayer will navigate their computer, tablet or smartphone internet browser to the Government Services web portal.

The **web portal** will be built using Html5, CSS3 and Bootstrap template. This combination of technologies will allow the portal to easily support current and future browsers and devices. Please review the following resources for more information:

- **http://getbootstrap.com/**
- **http://www.w3schools.com/html/html5_intro.asp**
- **http://www.w3schools.com/css/css3_intro.asp**

The **Restful Client Server** will enable government agencies to securely add and maintain approved services. These approved services will then be made available to the taxpayer on the web portal. The Restful services will also securely provide participating agencies with the taxpayer service requests; originated on the web-portal. Please review the following resources for more information:

- https://en.wikipedia.org/wiki/Representational_state_transfer

There will be three main **Restful APIs (application program interface) – Services, Subscription and TDD**.

The Services API – the government agency will add, remove and modify all services that will be presented on web portal. The Services API enable the content management of all service provider icons, images and text, representing their department, agency and services. No web content skill is required as all content is wrapped in pre-defined CSS3 Bootstrap templates. This ensures every department, agency and service will look and behave the same on all devices and all browsers.

Subscription API – the government agency will indicate all service criteria pertaining to the TDD data. All TDD data will be defined within the API and once subscribed will be provided with every taxpayer service request. This API will also enable the Restful server to push all new taxpayer initiated requests.

TDD API – with each taxpayer initiated request within the web portal, the IRS will securely provide the requested TDD data. The Subscription API will define for the IRS what values are being requested and will return those values (TDD ID, TDD description and TDD value) in a standard XML or JSON package. The IRS will maintain and reference a taxpayer GUID (128-bit integer) that represents a single taxpayer for all related requests; this eliminates the need to transmit PII in all service communications.

Restful Service Resources

The **Restful Client Server** will leverage standards-based data and transmission encryption. Below is a list of proposed data storage Restful resources. Please note that this document is not intended as a thorough overview of Restful or Resources, the following are provided for conceptual purposes only.

- Government Agency Item – will define a government department/agency ID and description
- Services Data Item – will define a service ID, government department ID and services description
- ServicesUI Data Item – will store all icons, header and body text for each department and service
- TDD Data Item – will define each of the TDD
- TDD Package Item – will pre-define sets of TDD Data Items, i.e. Cash flow data set
- TDDRequest Data Item – will define the Service Data Item and one or more TDD Data Items.
- Taxpayer Data Item – will define each subscribed taxpayer – a UID will be provided by the IRS.
- TaxpayerDetail Data Item – contact information provided by the taxpayer will be maintained here along with other non-PII data.
- ServiceRequest Data Item – this will relate the Taxpayer Data Item and the Services Data Item.

Resources are typically maintained within a securely placed database. The placement and further definition for this database is beyond the scope of this document.

TDD Packages will allow TDD data items to be grouped. These groupings are already well understood in the IVES business community and would be leveraged here to delivery immediate value and insight regarding the requesting taxpayers financial position.

Example service response from the Restful Server to the government department Restful Client.

1	3
Service request is initiated by taxpayer on web portal	Sample JSON message sent to Services API

```
{
  "request": {
    "ID": "10001",
    "service": {
      "ID": "12",
      "tdd": {
        tddPackageID: "22",
        tdds[
          "tdd": {"ID": 11,"title": "Gross Income","value": "12,500","type": int32},
          "tdd": {"ID": 17,"title": "Taxable Income","value": "10,500","type": int32}
        ]
      }
    }
  }
}
```

2	
Web portal Restful Client calls TDD API than calls Services API	

Summary

This solution fully leverages all available TDD data items to assist in pre-qualifying the taxpayer for an unlimited number of federal government services.

Examples of services that would benefit from TDD data:

myRA, VA benefits, Tuition assistance, Social security benefits, Tax credit qualification, Affordable healthcare act, SNAP, any federal government service that enrollment, qualification or participation in would benefit from TDD data.

What can TDD do?

Pre-qualify, fill out forms, identify status, ease access to services, define opportunities, prepare for the future, get an education, feed their children, access to benefits, give back to our veterans.

Why this solution?

Our development team weighed the idea of reimagining the "transcript" through a more effective use of TDD data items. We tried to imagine web forms or documents that displayed this data in any number of ways. Ultimately, what we recognized is the taxpayer's TDD data can be used securely and directly to transparently inform, enable and empower the taxpayer.

The TDD data is in fact very empowering; by transparently tying the taxpayer to government services, we believe we tap into this power. By enabling a marketplace that directly engages the taxpayer, we believe we open up tremendous opportunities for the taxpayer and government to better serve one another.

Secondly, we considered how we could communicate so much useful information without enabling yet another massive target for hackers; we recognized there is no need to display tax or PII directly. As for the single account setup, we simply leveraged the same four pieces of information the IRS and SSA currently use today to identify taxpayers on a paper 4506 or electronic SSA request.

Finally, we considered how to engage our fellow citizens in a manner they are already familiar and comfortable with and that leverages modern accessibility features like section 508.

We believe this proposal accomplishes these goals and does it in the safest and most accessible ways possible. We hope you agree.

Deliverables	Achieved	
Secure	✔	No TDD data, no PII
Ease of use	✔	Universally familiar design and workflow
Low cost	✔	Securely leverage industry standards
Inviting	✔	Leverage all social channels with no security risk
Appealing	✔	Bootstrap standardizes delivery to all devices
Useful	✔	Federal government services marketplace
Enabling	✔	Improve lives through better access to services
Clear and beneficial	✔	Leverage TDD to potentially pre-qualify for services
Call to action	✔	Engage the taxpayer in a friendly and familiar way
Accessibility	✔	508 and Accessible Electronic Docs Comm. of Practice