

Modeling a Sustainable Future for the Federal Depository Library Program in the 21st Century: White Paper on Models for the Federal Depository Library Program

Note: Ithaka S+R has been commissioned by the Government Printing Office (GPO) to analyze the Federal Depository Library Program (FDLP) and recommend a sustainable and practical model or models, consistent with its existing vision and mission, for its future. This document describes a set of potential new models for the Program that build upon the previously released sections; subject to further substantive revision and copy-editing, this document will be incorporated into the final report.

The models described in this document are proposals, and not recommendations, the latter of which will be provided at a later stage in the process. In addition, they do not examine legislative feasibility, which is also to be analyzed at a later stage. We welcome feedback on these models and their potential implementation. As these proposals are further developed in response to community feedback, we will develop final recommendations for a model and its appropriate implementation.

For more project background or to provide comments, please visit <http://fdlpmodeling.net> or email the project team at fdlp-modeling@ithaka.org. Reactions provided by February 22, 2011 will be especially helpful in our preparations of findings and the modeling exercise that will result from it, so we will be most grateful for your immediate review. In addition, we expect that any further comments made before March 4, 2011, can be accommodated in the final report.

This document describes several new models for the Program, offering several approaches through which the Direction (outlined in a previous section) can be implemented to a more or less complete degree. Plainly stated, *this document cannot be read on its own but only in the context of the [Direction document](#)*, which is the overarching framework that these models seek to animate. In particular, the “assumptions” that are reviewed in the Direction remain essential to understanding the role of the network of libraries proposed here in the context of our assumptions about GPO’s work and other environmental factors.

The objective of this exercise is to develop models that support the sustainability of the FDLP as a robust network of libraries providing permanent public access to government information. These models seek to reshape the Program to accommodate local and system-wide strategic shifts that are occurring across the library landscape with the transition to an increasingly digital environment, enabling libraries to more comfortably participate in the Program while maintaining or even increasing broad public access to government information and services to support its effective use. This document first discusses some of the broad *themes* that are reflected throughout these models, next describes a set of *building blocks* for new approaches to addressing several Program priorities, and finally arranges these building blocks into a series of cumulative *new models* for the FDLP.

Common elements across models

Several common themes pervade each of these models and reflect the Direction for the Program that we believe will best support the sustainable provision of permanent public access to government information via a robust network of libraries, in formats appropriate to the user, and with increased levels of support services to help users effectively discover, interpret, and make use of government information. These themes, discussed in more detail below, are:

- Enabling libraries to take on more *granular* roles, unbundling roles and responsibilities to allow libraries to more effectively choose a role in the Program that makes sense for them;
- Introducing *formal* roles for a wider variety of Program priorities, drawing new and old priorities more fully into the Program and giving libraries a greater ability to flexibly focus their involvement in the Program on the activities that best fit locally.
- Supporting *collaboration*, and allowing libraries to work together to take on roles and responsibilities that can be more effectively addressed by a group of libraries working together, reducing the burden on participants and allowing their shared efforts to have greater impact; and
- *Coordination* of activities, to ensure that even while individual libraries may more flexibly take on roles that match with local priorities, Program priorities are addressed purposefully and effectively across the FDLP.

Roles

Each of the building blocks of these models defines several new potential roles for libraries, reflecting two common themes that pervade these models. First, these roles generally enable libraries to take on more *granular* responsibilities, shifting away from the binary role choices of the current Program.

Second, these roles offer libraries the opportunity to take on *formal* responsibilities for Program priorities that are not explicitly included in existing roles, and that are at most informally addressed in the current Program.

One priority in the definitions of these roles is to move away from the current binary choices entailed in the Program's structure, in which a participating library can only take on a Regional or Selective role, or choose to leave the Program if neither of these offers a good fit. Although these roles work well for some libraries, they are poor fits for others, leaving some libraries unable to take on a role that matches well with local priorities. Thus, the Program currently contains libraries that chafe at a greater burden of responsibilities than they are truly comfortable with as well as libraries that would like the opportunity to contribute more in a particular area but are unable to take on all of the commitments associated with a formal change in role; it is also missing libraries that would like to be part of a network for permanent public access to government information but would seek to participate in ways not envisioned by the Program's current structure. Our goal is to enable libraries to identify a portfolio of roles that reflect their own unique character and priorities, allowing roles to be played by the libraries best suited to them; for some libraries, this may mean an emphasis on providing public services, while for others it may mean an emphasis on collections, either in digital or physical form. By offering libraries greater flexibility to take on the set of roles that make sense for them, these models will better distribute Program priorities across the FDL, aligning formal roles with institutional priorities to support the successful accomplishment of shared goals.

An additional emphasis in these models is providing libraries with *formal* roles that cover a wider range of responsibilities. Currently, the formal roles of the Program are largely focused around the collection and maintenance of tangible collections of government information; although libraries perform many more activities in support of permanent public access, these activities are largely not reflected or recognized in libraries' formal responsibilities. As a result, their performance may wax and wane, and little system-wide coordination can be performed. These models seek to introduce formal responsibilities that cover a wider range of activities than just maintaining print collections, also providing libraries with the opportunity to formally take responsibility for supporting digital collections or for providing public services to support the use of government information. Together with the above theme of more granular roles, these new formal roles allow libraries to focus their involvement in the Program on those activities that are most closely aligned with their institutional missions, potentially taking on greater formal responsibilities in some areas while leaving other priorities to be addressed elsewhere.

Although these roles may formalize libraries' responsibilities to perform many roles that are currently only taken on informally and not recognized within the Program, not every activity that libraries take on necessarily will have a formally designated basic role. Many libraries will continue to contribute to the Program by voluntarily taking on activities either under formal partnerships with GPO or informally. The formal definition of roles in these models is meant to add structure around critical aspects of the Program, but a library's formal roles should *not* be viewed as limiting factors that discourage taking on activities that may not be entailed in these formal roles.

Trust networks

In addition to defining a more *granular* set of roles that libraries can play within the Program and enabling libraries to take on *formal* roles to address new Program priorities, another major theme of the building blocks and models defined here is an emphasis on *collaboration*.

In the current Program, only individual libraries may take on formal roles and responsibilities; there are no provisions for groups of libraries to formally take on shared roles and responsibilities. The few examples of groups of libraries working together to formally address Program priorities – for example, Oregon’s shared Regional collection – are highly uncommon within the current Program. In other cases, FDLP member libraries have found ways to coordinate their activities or collaborate around a shared set of priorities outside of the formal structures of the Program; although these collaborations may support libraries working together in limited ways and have at times been supported by GPO, these endeavors lack formal status within the Program.

Outside of the Program, though, there is a substantial legacy of successful library collaborations through which groups of libraries work together to share a burden or take on a task beyond any of their individual capacities. The models defined here seek to formally provide libraries with the opportunity to collaboratively take on roles and responsibilities within the Program, enabling libraries to take greater advantage of the possibilities of working together to find efficiencies through sharing effort or to take on challenges that would be impractical for an individual library working alone. In each of these building blocks and models, roles and responsibilities may be equally well taken on by an individual library or by a group of libraries working together.

A common theme of these models is therefore that, when a formal Program role is taken on by a group of libraries, rather than by an individual library, responsibility for determining how that role is accomplished among those libraries rests with the group of libraries, and not with GPO. Libraries may find ways to split up a role, each taking responsibility for performing one component of a larger role; for example, libraries collectively taking on responsibility for maintaining a certain tangible collections may divide these collections up, in the aggregate holding the whole collection although each individual library only holds a portion of it. Libraries might instead contribute towards the centralized accomplishment of a role; for example, a consortium might host the same collection in a shared central repository, with each member library contributing financially to the development and maintenance of this collection while none of them actually individually holds any portion of the collection. Other models may also be possible; the specific arrangements within the group of libraries are the responsibility of these libraries, and GPO will not directly be involved in coordinating activities within a group of libraries.

In order for a group of libraries to formally take on responsibilities within the Program, it may be necessary for this group to have some formal status and thus ability to form an arrangement with GPO and among members. A library’s roles within a network supplement its individual roles; a library is responsible to GPO directly for performing any roles it may hold individually, and responsible to the network and its other members for performing any roles taken on as a part of this network. Libraries may be members of multiple networks with formal roles in the Program, and thus may have many responsibilities above and beyond those individually arranged with GPO.

Coordination of roles

While it has been a major priority in the definition of these new roles and responsibilities to provide libraries with greater flexibility to take on roles that align with their local priorities, these activities must be *coordinated* to ensure that Program priorities continue to be well served in these new models. Some roles included in these models lack specific targets for coordinated activities, as the specific level at which they are performed does not impact overall Program priorities; in other cases, however, if an inadequate number of libraries serve in certain roles, the accomplishment of Program priorities may be threatened. One challenge facing the Program has been that, in the absence of participation targets, it has been impossible to come to consensus about whether more participants are needed or whether different distribution of them would be desirable. We will therefore propose minimum levels of participation required, across the Program, in certain roles.

The levels of activities coordinated by these models should be understood as *minimums*; the goal of this system is not to discourage any libraries from playing roles they feel are appropriate, nor to encourage libraries other than those playing formal roles in these coordinated systems to abandon activities that continue to have value locally, but rather to ensure that participation in certain roles does not fall below critical thresholds. Additionally, it should be recognized that some critical roles may not be fully realized for some time; although libraries may take on responsibility for building what we will call “truly comprehensive collections,” for example, the development of these collections will not occur overnight. As such, some models coordinate roles that may decline in importance over time, to provide continuity during this transition.

Based on activity thresholds, appropriate incentives can be designed to encourage participation at the levels needed to reach system-wide goals. In many cases, there will exist a sufficient number of libraries that are intrinsically interested in performing necessary roles to reach desired levels of system-wide activity, and many of the structural changes proposed in these models are expected to increase the natural appeal of participating. In other cases, however, there may be an insufficient number of libraries that feel intrinsic incentives to perform necessary roles; in these situations, additional incentives will be required to offer the needed security that system-wide goals will be effectively accomplished. These incentives do not necessarily have to come in financial form, and indeed it may well be desirable that the level of financial incentives provided, if any, be kept to a minimum.

In coordinating system-wide activities, these models generally do not distinguish between activities performed by an individual library and those performed by a group of libraries; for example, a collection distributed across a group of libraries would be given the same weight as a similar collection hosted in a single institution.

Building blocks for new models

The series of models described here present different configurations of a small set of building blocks. Some models will make use of all of these blocks, while others will only utilize a subset of the components described here. Before discussing how these pieces can fit together to address Program

priorities, however, this document will provide a detailed discussion of each of the building blocks used in these models. These building blocks are:

- Short-term changes to tangible collections roles and responsibilities
- Transform and increase the availability of government information services
- Support preservation and integrity of digital FDLP materials
- Preserve tangible collections in an increasingly digital environment
- Maintain page-validated tangible collections

Short-term changes to tangible collections roles and responsibilities

One building block used in these models focuses on making near-term, non-structural changes to the existing Program. This component does not aim to *solve* the problems facing the Program, but rather to provide breathing room; the goal of these changes is to relieve immediate pressure on the Program, cultivating an environment more conducive to longer-term and more structural change, and to lay groundwork that may be necessary for more structural changes to be applied.

One of the greatest sources of pressure on the existing Program is that a relatively small number of current Regional libraries are frustrated with the burden of their responsibilities – especially their obligations to retain print materials – but do not feel able to step down to Selective status, largely due to concerns about the effect on existing Selective libraries in their region. Enabling these libraries to take on a role better suited to their local priorities without negatively impacting the libraries for which they are responsible would relieve significant pressures on the Program, giving the existing model a lease on life until deeper structural changes can be implemented. GPO should develop processes for identifying existing Regional libraries that no longer feel well-suited to the role, empowering them to step down to Selective status, and facilitating the transfer of formal oversight of Selective libraries to another Regional to ensure no interruption of service. GPO may be able to proactively work with those Regional libraries most frustrated with their roles in the existing Program to find opportunities for them to gracefully step down to Selective status, reducing immediate pressure on the Program from libraries no longer well-suited to play the Regional role as currently structured. Naturally, the more quickly GPO can move ahead with the more comprehensive reforms discussed in subsequent models, the less need there will be for this unfortunate but understandable step.

To reduce the burden of overseeing a network of selective libraries, and to facilitate a more efficient and effective process for libraries to dispose of or acquire tangible FDLP materials, GPO should also develop infrastructure to support a simple, national needs and offers process. Such a system would enable the harmonization of withdrawal processes, and in addition to reducing the burden on Regional libraries to coordinate individual processes and simplifying the deaccessioning process for Selective libraries, would support a more efficient and effective flow of documents between libraries. Such a national process would provide critical infrastructure to support the models described elsewhere in this document; as we imagine moving into an environment in which some libraries may choose to deaccession large quantities of document while others attempt to collect these discarded materials to build more comprehensive collections, a streamlined and nation-wide process for collections management will be necessary.

These changes are *not* viewed as providing substantially greater long-term sustainability for the Program, and they do not address the new challenges that have arisen to face the Program; as stated above, these are near-term opportunities that can stabilize the Program and support the implementation of more structural changes over time. Other changes may also fall into this category, better serving the needs of participants without implementing larger-scale structural change; we welcome suggestions of additional short-term changes to the Program that would better support library participants.

Transform and increase the availability of government information services

No matter how digital availability continues to increase the level of basic access of the American public to government information, users will continue to require support and assistance in effectively discovering, interpreting, and making use of government information. But while the provision of these government information support services has long been at the heart of the public mission of the Program, member libraries have few formal roles and responsibilities that relate to these activities. This building block focuses on formalizing responsibilities for providing government information support to the American public, with the goal of providing *more* and *better* support to end users in need of assistance in working with government information.

Roles

The roles defined in this component would for the first time provide libraries with specific *formal* responsibilities for providing government information support services to the American public, rather than largely assuming that such services will be provided as a necessary byproduct of maintaining tangible collections of government information. This component includes three major roles centered around government information support services, allowing a library to take on a formal role providing: an extremely basic level of support services, which may significantly broaden the availability of basic government information services to the American public; a more advanced level of services, providing expert assistance to members of the American public in working with government information; and a specialized level of services, going above and beyond the provision of excellent service within a region and taking on responsibility for addressing the system-wide needs of the public for targeted government information support services. This component also includes a supplemental role, seeking to coordinate training in government information topics to support libraries in developing and maintaining the necessary skills to perform these roles.

S1

Historically, government information services have been largely reserved for government information specialists within FDLP member libraries, with relatively low levels of awareness or knowledge of government information among non-member libraries or even among non-specialist staff at depository libraries. This model envisions enabling a significantly greater number of libraries to play a role in providing services in support of the discovery and use of government information to the American public, removing existing barriers to participation by encouraging current non-participating libraries to take on a services-only role within the Program. The S1 role supports libraries that wish to provide services to their community, but are unable to support dedicated government information staff. The S1 role is principally imagined as being appropriate for new entrants to the Program, although some

current participants may find this role a better fit for the levels of staff resources they are able to devote to government information.

S1 libraries provide basic support for the government information needs of their local community, providing front-line assistance for the American public in dealing with basic government information queries. S1 libraries are not expected to retain staff that specializes in government information, but to support the basic needs of their users with staff that have been regularly trained or certified in government information by their region's training library. For more advanced government information needs, S1 libraries will refer users to libraries providing higher levels of information services.

Ideally, this role would support the development of a broader network of libraries to provide front-line support for government information, potentially offering a role both for current member libraries that are considering leaving the Program and for non-members interested in playing a limited role within the Program. Any library that is willing to take on this service commitment should be allowed to play this role in the Program; allowing libraries to take on a services role independent of collections responsibilities should provide an important opportunity for building out the Program.

S2

Many currently participating libraries will find the S2 role a natural match for their existing activities, formally recognizing the contributions they already make in serving their local communities' needs for government information assistance. S2 libraries provide higher levels of services than S1 libraries, supporting the needs of their users through designated specialist staff, potentially in addition to general reference staff with some awareness of and training in government information. Although specialist staff may not necessarily be limited to *only* government information roles, a library in this role must retain at least one staff with a substantial emphasis on and expertise in government information. In addition to serving the needs of their local constituents, S2 libraries may handle (formally or informally) referrals and questions from nearby libraries that lack dedicated staff.

S3

While S1 and S2 libraries principally emphasize services to their local communities, serving the needs of their immediate constituents as well as other members of the American public for whom these libraries are the nearest source of support with government information, S3 libraries provide expert government information services for the entire American public, reaching beyond their local communities to provide a specialized service.

The specific way in which an S3 library provides this system-level assistance may vary widely: some libraries may provide remote reference assistance, directly assisting users in discovering, interpreting, and making effective use of government information over the internet, providing users who are unable or unwilling to visit a library in person with expert assistance; other libraries may be involved in the development of tools and information systems that support users in discovering, interpreting, and making effective use of government information online, without the direct intervention of a librarian; and some libraries may serve as a community source of special expertise on a particular topic,

participating in coordinated networks of expertise and serving as a resource for users system-wide with especially complex needs.

This role is intended for those libraries for which unique and high-value services are a top priority, providing a mechanism for libraries that invest in services that reach well beyond their local communities to be recognized for their contributions to meeting the system-wide needs of users of government information. The imprecise definition of specific activities required by libraries filling this role is intentional, encouraging libraries to identify and address innovative service needs rather than simply replicating existing models nation-wide. Due to this, we do not envision the coordination of a specific number of libraries to play this role, but rather imagine that this role will be formally granted to libraries that contribute to the broad needs of users beyond their immediate communities.

T

Currently, training on the use of government information for non-specialist librarians is typically uncoordinated; in order to develop basic awareness of and skills with government information among a significantly broader range of librarians and thus better support the needs of the American public, this component includes a support role that focuses on training and outreach within a geographic region. Libraries with the T role take on responsibility for coordinating training and outreach within their region, with the goal of raising awareness of government information and developing government information skills among both member and non-member libraries in their region. The specific arrangements by which this training is performed may vary; a T library may directly perform training, or may simply coordinate efforts in their region, but is ultimately responsible for developing and putting into action a strategy for outreach and training in their region. These libraries may also coordinate with broader training and instruction initiatives, potentially working with library schools and providers of continuing education to libraries to most effectively accomplish their goal.

The T role is a *supplemental* role, and may be played by a library in addition to its basic S1, S2, or S3 role (although it is difficult to imagine a scenario in which an S1 library would be able to effectively accomplish this role); for example, an S2T library would have responsibility for providing government information services to their local community *and* for coordinating training and outreach within their region. In some cases, it may be appropriate for network of libraries to collaboratively play *only* a T role, if it lacks any central presence to directly provide services itself; for example, this training and coordination role may be an excellent fit for a state consortium, but while this consortium might be able to effectively coordinate training and outreach, it might not make sense to imagine this consortium *as a network* directly providing government information services to end users. Thus, although an individual library may only take on the T role in addition to a basic role, a network of libraries may take on the T role individually (as an ST library).

Ensuring that every part of the country is covered by at least one T library will ensure that support and outreach is available to all librarians nationwide, raising awareness of government information and providing opportunities for training. Although in some cases this role will be a natural fit for existing Regional libraries, it may sometimes be more appropriate for this role to be taken on by a different library, such as a non-Regional state library agency, or by a network of libraries such as a state-funded

consortium. Due to the Program’s formal reliance on these activities, libraries must be selected by GPO in a competitive process to serve in this role,¹ and must sign a medium-term memorandum of understanding (perhaps 20 years in duration) with GPO to perform this role.²

Summary

Table 1 summarizes the responsibilities and coordination of each services role:

Table 1: Services roles

	S1	S2	S3	T
Provides basic government information services to local community	√	√	√	
Provides advanced government information services to local community		√	√	
Provides advanced or expert government information services system-wide			√	
Supports training and outreach across a region				√
Coordinated levels of participation	(No target)	(No target)	(No target)	Complete coverage nation-wide

Support preservation and integrity of digital FDLP materials

Although GPO has taken on an important leadership role in preserving and maintaining the integrity of digital government information, GPO alone cannot effectively accomplish these goals; distributed responsibility for preserving and maintaining the integrity of government information is a long-standing value of the Program that must be maintained in the digital environment to provide users with confidence that the materials they use in digital form will remain available and unchanged over the long term. Some libraries and other entities³ have begun to address these priorities outside of the formal

¹ Throughout this document, several components include the notion that libraries will be selected to serve in certain roles through competitive processes. The specific processes involved are not defined here; GPO would need to define appropriate processes to select libraries for each role, which may be as simple as basic selection criteria that a library must meet to take on a given role.

² Many models indicate that libraries playing certain roles may be required to enter into a memorandum of understanding with GPO to perform those roles, generally indicating that these libraries shift from “at-will” status within the Program to making formal and legally binding commitments to take on a role for a certain period of time. In most cases, these memoranda of understanding will not entail any form of financial compensation to libraries, but simply formalize the relationship between GPO and the library.

³ Just as the expansion of services considers the possibility of enabling a broader range of libraries to play formal roles in the Program, it may be appropriate to consider how a wider range of entities could valuably contribute to the accomplishment of system-wide objectives in the digital environment. For example, would it be possible for a 501(c)(3) digital library organization that makes freely available digital collections with no traditional, physical collections (such as the Internet Archive) to play a formal role in the FDLP? Although this model makes no recommendations on this topic, the potential for decoupling participation in the Program from the maintenance of tangible collections suggests that such definitional questions about eligibility for participation in the Program would need to be reexamined.

structures of the Program; this component imagines drawing these activities into the Program, formalizing and coordinating roles for libraries to collect, maintain, and preserve digital FDLP materials to support local priorities and system-wide values of preservation and integrity. In many ways, this approach draws upon the concept of “digital deposit” that has been advocated by members of the FDLP community.

Roles

The roles defined in this component recognize the wide range of interest across the library community in extending traditional FDLP roles to include digital materials; some libraries are highly motivated to collect digital FDLP materials, while others prefer to focus their energies elsewhere, and do not wish to host such collections. This component provides a range of formal opportunities for libraries to take on (or eschew) responsibilities for collecting, maintaining,⁴ and preserving⁵ digital FDLP materials to contribute to the Program goal of ensuring that these materials will remain available and accurate over the long term.

D1

The D1 role enables libraries to take on flexible and minimal responsibilities within the Program, supporting those libraries that wish to play a role in the Program but do not wish to build or maintain collections of digital FDLP materials. Libraries that take on the D1 role do not accession or store local copies of FDLP materials in digital form, relying on digital collections hosted elsewhere (by GPO, its partners, or other libraries) to support user needs. Although D1 libraries do not host any FDLP materials locally, they may have records for digital FDLP materials in their catalog or otherwise support and facilitate the discovery and use of government information in digital form.

D2

D2 libraries, on the other hand, maintain local working collections of digital FDLP materials to support local priorities and user needs. These libraries’ development and maintenance of digital collections is entirely at will, collecting, maintaining, and disposing of local copies of digital materials (born-digital or digitized) from GPO and other government sources according to local priorities in order to address local user needs, develop local services, or for other reasons. As these digital materials may be deaccessioned at will, however, these collections have no formal status in securing long-term preservation or integrity. D2 libraries may also choose to integrate officially provided digital materials with other digital materials, including other government-provided materials not made directly available through the FDLP, but have no responsibility to do so. It is generally assumed that D2 collections will be made publicly available, but libraries in this role may choose to build and maintain “dark” digital collections if they so prefer.

⁴ Throughout this document, the terms “retain” or “maintain,” as applied both to tangible and digital materials, indicates that libraries may not deaccession these materials, and must make good faith efforts to secure them against accidental loss or damage. Retention of materials is differentiated from *preservation* of materials, which indicates a higher level of responsibility.

⁵ Throughout this document, the term “preserve,” as applied both to tangible and digital materials, indicates that libraries must invest in the long-term security and usability of the materials, above and beyond simply retaining them. This involves following best practices for preservation by planning for disaster recovery, maintaining materials in secure environmental conditions, and as appropriate reformatting materials

The collections built and retained by D2 libraries principally serve the needs of these libraries' local communities, while the D2 role enables libraries to play roles in providing services or maintaining tangible collections without being required to build or maintain any digital collections. To enable libraries to freely take on these roles as appropriate to serve the needs of their local communities, any library should be allowed to take on these roles with minimal formalities.

D3

Historically, government publications have been made tamper-resistant by the broad distribution of FDLP materials to a network of libraries, which maintain these collections independently of federal government control and can serve as an integrity check on the system. D3 libraries replicate this system in the digital world, ingesting and maintaining independent collections of digital FDLP materials.

D3 libraries build and maintain comprehensive collections that completely duplicate all FDLP materials disseminated through official GPO channels in digital form,⁶ including both born-digital and digitized collections, to support local priorities as well as to maintain an independent copy of these materials not under the direct control of the federal government. These libraries are responsible for collecting all FDLP materials made available in digital form through official GPO channels,⁷ and must retain all digital materials thus accessioned. D3 libraries may also choose to accession government information not provided through centralized GPO infrastructure, including materials hosted under partnership agreements or fugitive documents, but have no responsibility to do so; their formal responsibilities are limited to capturing and maintaining complete duplicates of those materials provided through formal GPO channels. In addition, D3 libraries may elect to conduct active management of stored documents, migrate to new formats over time, and other preservation-related processes, although they are under no obligation to do so. D3 collections may be made publicly accessible on the open web, made available for a local community, retained as a closed backup collection at the discretion of the library, or triggered for access depending on external circumstances.

To adequately support the integrity of these collections, this model envisions the coordination of at least seven D3 collections (complete collections of officially provided FDLP materials) maintained independently of GPO by participating libraries. This minimum number of collections (there certainly can

⁶ This model assumes that all documents disseminated through the FDLP (both born-digital as well as all appropriate digitized materials as well), and all documents identified as "fugitive" documents within the scope of the FDLP, will be made available through centralized GPO infrastructure such as FDsys, meaning that a complete duplicate of the materials made available through this infrastructure will capture all known digital FDLP materials. Failing this, we assume that GPO will provide comprehensive documentation of all known digital FDLP materials including both those hosted on centralized GPO infrastructure and those hosted by agencies under partnership agreements, and will work with agencies to support D3 or D4 libraries in programmatically harvesting comprehensive sets of government information that match GPO's understanding of the complete universe of digital FDLP materials. Although libraries in all roles are encouraged to support GPO's efforts to discover and track "fugitive" digital documents, no library is required to host materials that are not disseminated by GPO or indicated as GPO as being within the scope of the FDLP.

⁷ The term "available in digital form" is used throughout this document as shorthand for materials that are freely available online in suitable high-quality digital form, and that are being reliably digitally preserved and defended against tampering. It excludes materials that the Superintendent of Document may choose to designate as essential for a participating library to maintain in paper form as an essential contribution to American democracy.

be more if additional libraries elect to participate in this role) is proffered based on the minimum number of copies suggested by the LOCKSS Alliance for a reliable digital system.⁸ Due to the Program's formal reliance on these activities, libraries must be selected by GPO in a competitive process to serve in this role, and must sign a medium-term memorandum of understanding with GPO to perform this role.

D4

GPO's in-house digital preservation efforts provide a high degree of assurance that digital government information hosted by GPO will remain accessible over the long term. Currently focused around the FDsys platform, we hope that these efforts will (as is expected) be submitted to the Center for Research Libraries (CRL) for formal audit. Even so, independent preservation efforts outside of GPO control are needed to provide additional assurance that materials would be effectively preserved over time. In addition to providing redundancy, additional diverse preservation methods would complement GPO's efforts, and independent oversight and sources of funding would support the long-term sustainability of digital preservation efforts for FDLP materials. D4 libraries play this role, not only maintaining but actively managing and preserving comprehensive collections of digital FDLP materials.

D4 libraries have the same responsibilities as D3 libraries for building and maintaining comprehensive collections of digital FDLP materials. D4 libraries build and maintain comprehensive collections that completely duplicate all FDLP materials disseminated through official GPO channels in digital form, including both born-digital and digitized collections, to support local priorities as well as to maintain an independent copy of these materials not under the direct control of the federal government. These libraries are responsible for collecting all FDLP materials made available in digital form through official GPO channels, and must retain all digital materials thus accessioned. In addition to these responsibilities, however, D4 libraries must preserve all the materials thus accessioned collections in digital preservation archives certified as applying community best practices (via the DRAMBORA or TRAC certifications, or other preferred equivalents as these arise). D4 collections may be made publicly accessible on the open web, made available for a local community, retained as a closed backup collection at the discretion of the library, or triggered for access depending on external circumstances.

To provide a preservation bulwark for digital FDLP materials, this model envisions the coordination of at least two D4 collections which would complement GPO preservation activities. This number builds on the advice of a 2006 report by the Council on Library and Information Resources evaluating preservation priorities for electronic journals, which suggested that "participation in more than one program can ensure that different approaches and strategies are tried and assessed;"⁹ as such, this model suggests that at least two different independent preservation approaches beyond GPO's activities be arranged.

⁸ Victoria Reich and David Rosenthal, "Distributed Digital Preservation: Private LOCKSS Networks as Business, Social, and Technical Frameworks," *Library Trends* 57, no. 3 (Winter 2009): 461. Reich and Rosenthal have each suggested that more copies may be needed for government information if (as is believed) threats to the integrity of such collections are higher, but unfortunately modeling work has not been conducted to provide such estimates. We emphasize that our recommended thresholds throughout these models should be seen as absolute minimums, and that more copies would provide greater tamper-defense and tamper-evidence.

⁹ Anne R. Kenney et al., "E-Journal Archiving Metes and Bounds: A Survey of the Landscape" (Council on Library and Information Resources, 2006), <http://www.clir.org/pubs/reports/pub138/contents.html>.

Due to the Program’s formal reliance on these activities, libraries must be selected by GPO in a competitive process to serve in this role, and must sign a fifty year memorandum of understanding with GPO to perform this role.

Summary

Table 2 summarizes the responsibilities and coordination of each digital collections role:

Table 2: Digital collections roles

	D1	D2	D3	D4
Collects digital versions of FDLP materials		√	√	√
Comprehensively collects digital versions of FDLP materials			√	√
Preserves digital collections of FDLP materials				√
Coordinated levels of participation	(No target)	(No target)	≥ 7	≥ 2

Preserve tangible collections in an increasingly digital environment

Tangible collections of government information are the historic core of the Program; the Regional and Selective roles are fundamentally based around the goals of broadly disseminating, providing access to, and preserving materials in tangible form. Although several components of these models emphasize addressing additional Program priorities, the Program clearly must continue to provide access to these materials in tangible form over the long term. This component imagines new ways to structure these roles and responsibilities that will more sustainably support the goal of ensuring that tangible collections remain accessible to support user needs. This component allows libraries the flexibility to over time choose to draw down on their tangible collections of government information as users’ needs are better served by digital versions, but also prioritizes ensuring that tangible collections are preserved for the long term to support residual access needs for tangible versions of materials and to provide a backup for digital versions. Ultimately, this component will result in higher levels of confidence in the preservation of – and therefore the permanent public access to – all materials in tangible collections than has ever previously been the case.

Roles

This component moves away from the long-standing binary of Selective and Regional roles, recognizing that these roles are not equally good fits for all libraries, and that Program priorities could be better supported by enabling libraries to choose from a wider range of formally defined roles. This will enable libraries to select a role for tangible collections that better fits with their local priorities, while coordinating these individual contributions to meet system-wide needs. As in the digital component, this building block recognizes that some libraries may be best suited to participate in the Program without maintaining local tangible collections at all, focusing on providing services or maintaining digital collections, while other libraries may wish to take on more ambitious roles in building and maintaining tangible collections of government information.

T1

The T1 role enables libraries to take on flexible and minimal responsibilities within the Program, supporting those libraries that wish to play a role in the Program but do not wish to build or maintain collections of tangible FDLP materials. This role is principally imagined as enabling new participants to enter the Program, taking on services-oriented roles without the burden of building tangible collections; in some cases, it may also be a good fit for existing Selective libraries that might otherwise leave the Program.

GPO does not ship *any* new materials to T1 libraries; in effect, these are libraries that have chosen to not receive any materials in tangible form, relying on digital access, interlibrary loan, or referrals to nearby libraries with tangible collections to satisfy the needs of its local community. T1 libraries with existing tangible collections may choose to retain any portion of these collections at will, and may freely deaccession any materials from their tangible collections at will via a national needs and offers process. Although some T1 libraries may choose to maintain but not add to relatively large tangible collections, the T1 role is principally intended for libraries that neither receive any new tangible materials nor retain many (if any) tangible collections; this role enables libraries to play a services or digital collections role in the Program without being required to possess *any* tangible FDLP collections.

T2

While T1 libraries receive no new tangible materials from GPO, T2 libraries select materials for distribution from GPO, much in the manner of a current Selective library. Similarly to T1 libraries, T2 libraries may freely deaccession any materials from their tangible collections at will via a national needs and offers process. The T2 role enables libraries to build and maintain working collections of tangible FDLP materials based on local user needs and library priorities. Tangible collections in T2 libraries are built and maintained exclusively to serve the needs of the library's local community, and have no *formal* role in the long-term preservation of FDLP materials, although deaccessioned materials may be integrated into collections that do have longer-term responsibilities.

These libraries serve a role as front-line providers of tangible government information, maintaining collections tailored to the needs of their local constituencies. As an increasing share of these user needs are met by digital versions, these libraries may choose to draw down on their investment in local tangible collections; in other cases, however, libraries may continue to maintain tangible collections, reflecting ongoing local user needs. To enable libraries to freely take on this role as appropriate to serve the needs of their local communities, any library should be allowed to take on this role with minimal formalities.

T3 and T4

The responsibilities of libraries in T3 and T4 roles principally focus on meeting the broad and long-term needs of the American public for access to tangible versions of FDLP materials. These roles are discussed together due to their close relationship to each other; although these models assume that the importance of tangible access will decline over time as more and more materials are made available digitally, these classes of libraries will maintain a backstop of tangible collections that will support continuing access needs. When possible, needs for access to tangible materials not available at one's

local library should be met through these T3/T4 collections rather than through T5 or T6 collections; as such, both T3 and T4 libraries should support access needs not just on the local level but across the library system through interlibrary loan and other forms of document delivery. These roles are imagined as fitting well with the priorities of many existing Regional libraries, offering the opportunity for these libraries to either retain roughly their current role in the Program or to take on a role that will over time enable them to draw down on their tangible collections in a structured and responsible way.

The responsibilities of libraries in the T3 role principally focus on supporting regional and system-wide access needs for tangible versions of materials that are not yet available digitally; this enables these collections to be dynamic, meaning that they can, at their individual discretion, reduce the size of their tangible collections over time as more materials are made available digitally.¹⁰ GPO automatically distributes tangible copies of all FDLF materials that lack digital equivalents at the point of publication to all T3 libraries. T3 libraries may also select to receive any further tangible materials also available digitally in order to support local needs. T3 libraries must maintain tangible copies of materials that are not available in digital form, and should prioritize both making these materials available locally and via interlibrary loan, but may freely deaccession any tangible materials once they become available in digital form via a national needs and offers process.

While T3 libraries only have formal responsibilities to accession and maintain tangible versions of materials not available digitally, T4 libraries have similar responsibilities for tangible versions of all FDLF materials, including those with available digital equivalents. GPO automatically distributes tangible copies of all FDLF materials that are made available in tangible form to all T4 libraries. T4 libraries must retain all tangible materials that they accession, including those with a digital equivalent, although they may deaccession duplicate copies of any tangible materials via a national needs and offers process. Note that the T4 role is substantively similar to the collecting role of Regional depository libraries under the present model, although without any obligation to coordinate a discard process for other libraries.

As these libraries' roles are so closely linked to the digital availability of collections – especially T3 libraries, which gain flexibility in their collections management decisions as materials are made available digitally and thus are directly incentivized to support digitization efforts – it may make sense for T3 libraries to play a formal role in supporting the digitization of FDLF materials. An obvious opportunity would be to offer these libraries a digitization exemption to retention requirements, allowing materials that would otherwise meet retention requirements to be deaccessioned in support of digitization efforts that result in a freely accessible digitized version that meets all community requirements, either performed by the library directly or by a third party. And there may be other opportunities to capitalize on these libraries' direct interest in increasing digital availability, such as formally integrating libraries with these roles into the process of correcting or improving digitized materials. Although the specific process by which FDLF materials will be made available digitally is

¹⁰ As a reminder, the term “available in digital form” is used throughout this document as shorthand for materials that are freely available online in suitable high-quality digital form, and that are being reliably digitally preserved and defended against tampering. It excludes materials that the Superintendent of Document may choose to designate as essential for a participating library to maintain in paper form as an essential contribution to American democracy.

beyond the scope of this project, there may be many valuable synergies between these libraries' intrinsic interests and digitization priorities.

Together, the libraries in the T3 and T4 roles perform the essential function of supporting system-wide access needs for tangible materials, especially important for those materials not yet available in digital form. This backbone of access collections will supplement working collections in T1 and T2 collections, which will retain materials principally based on their perceived local value, by maintaining and making available for system-wide use large collections including even low-use materials that might be retained in few working collections, and will provide important continuity while a more comprehensive set of preservation collections is being developed. To support these system-wide needs, this model envisions the coordination of at least 15 collections, either of tangible copies of all materials (T4 collections) or of tangible copies of materials not yet available in digital form (T3), making these materials broadly accessible locally and across the library system. Although few if any existing collections are truly comprehensive, and neither of these roles obligates libraries to collect retrospectively to fill in gaps, these overlapping collections in the aggregate should support the broad majority of access needs, with more comprehensive collections satisfying those needs that cannot be met by T3 or T4 libraries. Due to the Program's formal reliance on these activities, libraries must be selected by GPO in a competitive process to serve in this role, and must sign a twenty year memorandum of understanding with GPO to perform this role.

T5

While T3 and T4 collections are expected to support most regional and system-wide access needs of the American public, providing for truly long-term continuity of access to tangible collections will require libraries dedicated to a preservation role. For a variety of historical reasons, including the loss or damage of materials over time or their simply never having been accessioned in the first place, few if any existing FDLP collections are truly comprehensive.¹¹ Thus, to provide a preservation bulwark for the FDLP, truly comprehensive collections must be built, transitioning the Program away from reliance on the hope that largely uncoordinated overlapping collections will effectively ensure the preservation of materials. This shift towards coordinated, comprehensive preservation collections is a common theme across the library landscape, as groups of libraries increasingly seek opportunities to build reliable shared infrastructure for the long-term preservation of content types such as scholarly journals. T5 collections play this role for FDLP materials, committing to the development of truly comprehensive collections of FDLP materials to build a solid preservation backbone for government information.

Like T4 libraries, GPO automatically distributes tangible copies of all FDLP materials that are made available in tangible form to all T5 libraries. T5 libraries also take on the responsibility of collecting retrospectively, working towards the development of truly comprehensive collections of FDLP materials in tangible form; supported by a national needs and offers process, T5 libraries must make good faith

¹¹ This document differentiates between most currently existing "comprehensive" collections – which may have gaps due to materials not being received, being lost or damaged, or otherwise not being present – and "truly comprehensive" collections, which describes collections that have been actively built and verified to contain all FDLP materials that fall within their scope.

efforts to over time identify and fill in gaps in their tangible collections of FDLR materials.¹² Like T4 libraries, T5 libraries must retain all tangible materials that they accession, including those with a digital equivalent, although they may deaccession duplicate copies of any tangible materials via a national needs and offers process. But while T4 libraries simply have a commitment to retain materials, T5 libraries also take on responsibility for programmatically preserving their collections according to community best practices.

This model envisions the coordination of T5 collections to serve as a preservation backbone for the FDLR. The appropriate number of collections to play this role is derived from the application of a slightly modified version of the operations research model underlying Ithaka S+R's *What to Withdraw* for decision-making about system-wide print preservation of scholarly journals. The full application of this tool depends on the presence of a minimum number of dark archival page-validated copies in calculating system-wide preservation needs; as this model does not consider the creation of any page-validated collections, we have modified the application of this tool somewhat. In this application of the tool, we use only a single projected "loss rate" rather than differentiating between dark archival and circulating materials,¹³ but otherwise apply the existing model with the goal of identifying a minimum number of copies necessary to achieve the extremely conservative goal of providing greater than 99.9999% confidence that at least one copy of each item will be preserved for at least 100 years. Although we recognize that our modification of the application of this tool may introduce some level of imprecision, a system that coordinates at least the fifteen collections indicated by the application of this tool with these parameters should provide an extremely high level of confidence that materials will remain reliably available over the long run. Thus, this model suggests the creation of fifteen to twenty truly comprehensive collections of tangible FDLR materials.

We expect that many of these tangible preservation and integrity backbone collections will be built around one or more existing Regional libraries, in many cases by a network of libraries. This backbone will provide a highly visible and essential role for libraries (principally existing Regional libraries) to step forward and assert their commitment to the long-term preservation and maintenance of integrity of FDLR materials. Several different approaches to the development of these collections can be imagined. For example, an individual library with a history of retrospective collecting could choose to take on this role, formalizing its commitment to existing practices. Or multiple libraries could play this role collaboratively, dividing up responsibility to retrospectively build collections along agency lines or on another basis and managing collections outside these areas according to their individual roles.

Reflecting the importance of this set of roles to the ultimate success of the Program and concern that without extrinsic incentives an insufficient number of libraries may be interested in playing these roles, these roles should be incentivized by direct or in-kind support from GPO. Due to the presence of these incentives, to take on these roles, libraries must be selected by GPO via a competitive process, and must sign a fifty year memorandum of understanding with GPO to perform this role.

¹² This model assumes that T5 libraries would be responsible for collecting all tangible materials that were formally distributed through the FDLR, and would also collect any tangible copies of "fugitive" documents identified as within the scope of the FDLR,

¹³ This calculation assumes an annual "loss rate" of 0.5% for all materials.

Summary

Table 3 summarizes the responsibilities and coordination of each tangible collections role:

Table 3: Tangible collections roles

	T1	T2	T3	T4	T5
Receives tangible versions of selected new FDLP materials		√	√	√	√
Receives tangible versions of all new FDLP materials that are not available digitally			√	√	√
Maintains tangible versions of all FDLP materials not available digitally			√	√	√
Maintains tangible versions of all FDLP materials, including those available digitally			√	√	√
Receives tangible versions of all new FDLP materials				√	√
Retrospectively collects to develop comprehensive tangible collections of FDLP materials					√
Preserves collections according to community best practices					√
Coordinated levels of participation	(No target)	(No target)	T3 + T4 ≥ 15	≥15	

Maintain page-validated tangible collections

While the above component redefining roles for tangible government information draws on Ithaka S+R's *What to Withdraw* framework to establish target levels of print preservation required to ensure long-term access to government information, this framework can only be applied in a modified fashion in the absence of highly validated print collections. Although Ithaka S+R hopes to extend this framework in the near future to remove its dependence on page-validated collections (collections that have been checked for accuracy and integrity at the page level), the current framework cannot be fully applied without a baseline level of page-level validation. This component modifies the above building block to more fully implement the *What to Withdraw* framework, including coordinating the creation of page validated collections to serve as the backbone of a long-term system-wide preservation program. This would provide an extremely high level of confidence that materials would be effectively maintained over the long term, but may be difficult, costly, and potentially impossible to implement effectively.

This building block duplicates the roles and coordination efforts for tangible collections described above, with two small but important changes that more completely implement the Ithaka S+R *What to Withdraw* framework. Although this framework is designed for scholarly journals, the use of the underlying risk analysis framework with very high levels of confidence offers the best known scientific estimates for retention of tangible materials needed to support long-term preservation. This framework, however, requires a backbone of tangible materials that have been validated for accuracy and freedom from errors at the page level; unlike the, this version of the component thus integrates a role for page-validation and offers coordination thresholds based on this framework.

The first change is the addition of the T6 role, for libraries that validate their print collections. T6 libraries have the same collecting, retention, and preservation requirements as do T5 libraries, and also commit to checking materials at the page level (or similar levels for other material types) to identify any errors in original materials and seek out error-free versions where problems are identified.

Second, the thresholds for the preservation & integrity backbone in this model change to match those indicated by the *What to Withdraw* framework. This framework suggests that two page validated copies of an item and eight non-validated copies will give greater than 99.9999% confidence that at least one copy will survive a period of 100 years.¹⁴ To reach these thresholds, this model would envision the coordination of two page-validated, truly comprehensive, programmatically preserved collections (T6 collections) and eight truly comprehensive, programmatically preserved collections that are not validated (T5 collections), rather than the fifteen to twenty T5 collections defined in the previously described tangible collections building block. While it may seem counter-intuitive that fewer copies could provide similar or even greater levels of confidence, that is explained by the onerous but valuable page-verification process, offering an extraordinary high level of confidence in the completeness of these materials.

Summary

Table 4 summarizes the responsibilities and coordination of each tangible collections role:

Table 4: Tangible collections roles

	T1	T2	T3	T4	T5	T6
Receives tangible versions of selected new FDLP materials		√	√	√	√	√
Receives tangible versions of all new FDLP materials that are not available digitally			√	√	√	√
Maintains tangible versions of all FDLP materials not available digitally			√	√	√	√
Maintains tangible versions of all FDLP materials, including those available digitally			√	√	√	√
Receives tangible versions of all new FDLP materials				√	√	√
Retrospectively collects to develop comprehensive tangible collections of FDLP materials					√	√
Preserves collections according to community best practices					√	√
Page-validates collections						√

New models

Clearly, these building blocks can be assembled in a variety of different ways to advance the Program towards the Direction presented previously. While implementation of all of the above components will most completely move towards this Direction, different arrangements of these building blocks may have benefits, being more feasibly implemented or offering other advantages. Thus, we here present several

¹⁴ This calculation assumes that the page validated copies are held in relatively closed “dark archive” collections, while the non-validated copies may be in circulating collections. It also assumes an annual “loss rate” of .1% for validated dark archival copies and .5% for circulating copies.

different potential arrangements of these components into coherent models; in a later stage of this project we will recommend a particular model as offering the best balance. The models presented here range from relatively modest adjustments to the current Program that focus on addressing immediate priorities to more comprehensive restructuring exercises that seek to support the full realization of the recommended Direction and thus the sustainable accomplishment of the Program’s mission and goals in a rapidly changing environment.

Models

The models described here are *cumulative*; each model integrates the elements of the models that precede it, adding a new component to address an additional Program priority. In arranging and sequencing these models, we seek to first stabilize the Program, then address Program priorities that are poorly served in the existing Program, and finally to fully restructure the Program.

In all models that integrate multiple building blocks, if a model describes a set of new formal roles, each library in the Program is then assumed to formally take on one *basic role* in that category; thus, in a model that defines new roles for two categories, a library must have a formal role in both categories. These roles are not related, and a library may take on a relatively minimal role in one category and a much more intensive role in another, but must have a formal role in each component included in a model. In early models, these roles would be in *addition* to their existing Regional or Selective role; in later models that integrate tangible collections components, their new roles would take the place of their existing role.

Model 0

Our baseline is Model 0, in which none of these components are applied and the Program remains unchanged. In this circumstance, Program participation will continue to suffer as more and more libraries feel unable to continue to play the roles allocated to them. Furthermore, important Program priorities – including digital preservation and integrity as well as supporting the changing needs of users for support in discovering, interpreting, and making use of government information – will remain unaddressed. Ultimately, a failure to evolve the Program’s structures to better match the changing environment will dramatically decrease both short- and long-term user access to government information as well as continuing to marginalize the Program within the broader library context. The following table provides an overview of the changes implemented in Model 0:

	Short-term changes to tangible collections roles and responsibilities	Transform and increase the availability of government information services	Support preservation and integrity of digital FDL P materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 0					

Model 1

This model proposes the implementation of minor changes to the Program’s handling of tangible collections issues and formalizes the Program’s commitment to services to the American public through more concrete roles for libraries that emphasize services. We view these as the most urgent and immediate priorities for the Program, although on their own they do not represent a sustainable future for the Program. In this model, a library would retain its existing Regional or Selective designation, but each library would also take on a new role formalizing its responsibility for providing services to the American public. Model 1 would implement the “short-term changes to tangible collections roles and responsibilities” and “transform and increase the availability of government information services” components described above. The following table provides an overview of the changes implemented in Model 1:

	Short-term changes to tangible collections roles and responsibilities	Transform and increase the availability of government information services	Support preservation and integrity of digital FDLP materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 1	√	√			

Model 2

In addition to integrating the immediate changes described in Model 1, Model 2 more formally coordinates roles and responsibilities for libraries around digital collections, seeking to add to system-wide confidence in the long-term availability and accuracy of digital FDLP materials. In this model, a library would retain its existing Regional or Selective designation, but each library would also take on a new role formalizing its responsibility for providing services to the American public as well as a new role formalizing its responsibility for maintaining digital collections (although this role may be that this library does not have any responsibilities for digital collections). The following table provides an overview of the changes implemented in Model 2:

	Short-term changes to tangible collections roles and responsibilities	Transform and increase the availability of government information services	Support preservation and integrity of digital FDLP materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 2	√	√	√		

Model 3

Model 3 builds on Model 2, but also would restructure the preservation and provision of tangible collections to recognize the implications of the ongoing shift to an increasingly digital environment. In

this model, a library would no longer retain its existing Regional or Selective designation, instead taking on three new roles: a new role formalizing its responsibility for providing services to the American public; a new role formalizing its responsibility for accessioning and maintaining digital collections (although this role may be that this library does not have any responsibilities for digital collections); and a new role formalizing its responsibilities for accessioning and maintaining tangible collections (although this role may be that this library does not have any responsibilities for tangible collections). The following table provides an overview of the changes implemented in Model 3:

	Short-term changes to tangible collections roles and responsibilities	Transform and increase the availability of government information services	Support preservation and integrity of digital FDLP materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 3	√	√	√	√	

Model 4

Model 4 extends Model 3, more completely applying Ithaka S+R's *What to Withdraw* framework by suggesting thresholds for retention of tangible collections, including page-validated collections, that would provide an extremely high level of confidence that materials would be effectively maintained over the long term. In this model, as with Model 3, a library would no longer retain its existing Regional or Selective designation, instead taking on three new roles, one each for services, digital collections, and tangible collections. The following table provides an overview of the changes implemented in Model 4:

	Short-term changes to tangible collections roles and responsibilities	Transform and increase the availability of government information services	Support preservation and integrity of digital FDLP materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 4	√	√	√	√	√

Summary

Table 5 provides a very high level overview of how each of the models proposed in this paper builds towards the fullest realization of the Direction. While the building blocks of these models could, theoretically, be rearranged into a number of other configurations, we have chosen to only propose models that reflect the priorities identified in our research. That is, the Program is most urgently in need of certain immediate changes to its structuring of system-wide tangible collections, and the American public is most urgently in need of increased access to innovative services that support working with government information. Any Program structure that does not begin with those elements is, we believe,

out of sync with the needs of the Program and of the American public. After a careful review and evaluation of these models, we will in a later stage of this project recommend a particular approach to restructuring the FDLP to sustainably accomplish its existing mission, vision, and values in the 21st century.

Table 5: Overview of models

	Immediate changes to tangible collections	Transform and increase the availability of services	Support preservation and integrity of digital materials	Preserve tangible collections in an increasingly digital environment	Maintain page-validated tangible collections
Model 0					
Model 1	✓	✓			
Model 2	✓	✓	✓		
Model 3	✓	✓	✓	✓	
Model 4	✓	✓	✓	✓	✓

Conclusion

These models assemble several building blocks to together address Program priorities, with the paired goals of reducing the burdens of participation in the Program for member libraries and simultaneously making the Program more effective at providing permanent public access to government information. Although Model 4 would be the most complete implementation of the Direction we have defined for the Program, each other models would take important steps in both addressing those priorities currently under-supported by the existing Program and promoting the sustainability of the Program in accomplishing its existing mission.