

Strategic Foresight Towards a Preferred Future

Prepared for: The Seattle Public Library
By: The University of Houston Foresight Program

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EXECUTIVE SUMMARY: OVERVIEW & KEY FINDINGS

The Seattle Public Library (SPL) asked Houston Foresight for help in exploring the future of libraries with a timeframe set to 2032. The main purpose was to explore and illuminate the possible outcomes of libraries while also crafting a preferred future as input into the Library's upcoming strategic planning activity.

This is a common application of foresight work. There are two principal ways that the combination of strategic foresight and strategic planning can be very effective. First, it gives the SPL planning team an enhanced mental model of potential future possibilities. The future context becomes less of a mystery and more real. As this comprehensive

report shows, the Library's planning team reviewed and digested insights about the future that were derived from hundreds of trends, issues, plans, and projections, as well as from nearly 50 staff and community interviews; and nearly 100 survey responses from community members. The Library worked with the foresight team to synthesize and make sense of all this information, ultimately crafting six possible future scenarios of the Library system to consider. This planning team has done the proper homework to understand the possible future scenarios that a new Library strategic plan must be flexible enough to address. While the Library conducted this foresight research and community outreach, Chief Librarian Tom Fay also hosted four in-person Community Conversations in Library branches to hear directly from Library patrons about their future needs and interests. The Library plans to engage community more in 2023 through the strategic planning process.

What are the potential futures of libraries...and what can we do to achieve a preferred future?

In addition to providing an enhanced mental model of the future, foresight work also helps sift through a wide range of potential strategic issues and, at the very least, set a starting point for the planning effort. The team collectively identified a few dozen issues that are worthy of consideration and conducted a preliminary analysis of how they might be handled. This is sometimes referred to as rehearsing for the future: "If this happened, how might we respond?" The team thus increased its capacity to anticipate and prepare for the future.

The findings that emerge tell a story of a future that is characterized by both promise and peril. Promise is perhaps most succinctly captured in what futurists refer to as a "preferred future." Mindful of the research and analysis, the preferred future brings in the additional element of what the team would like to see happen. Indeed, the *Ecosystem Anchor* scenario describes a preferred future in which the Library is a hub at the center of the community and connecting its patrons to tailored information services, community partner services, and other impactful Library services that help make Seattle a thriving city. Peril is perhaps most acutely captured in what futurists call a "collapsed future." How might the future turn out badly? The team needs to understand how this could happen so it can actively work against it or avoid that scenario. The other scenarios contain a mix of promise and peril. Each scenario will tend to present some unique challenges. The team identified two dozen potential strategic issues that include a mix of opportunities and threats. At the same time, the team was able to identify seven themes of change that seemed to be present no matter which scenario unfolded. These "super seven" themes are vital to consider for strategic planning. They are:

- Equity: The Library engages and collaborates with community and makes active choices and decisions that lead to improved outcomes in areas of racial and social justice, diversity, equity, inclusion and accessibility.
- Staffing: A core element in most scenarios, staffing must be “right” in order to move toward positive scenarios and avoid the others.
- Space: Several scenarios anticipate physical building issues that require advanced planning and dedicated funding.
- Prioritization: With so many services to offer, there are internal and community calls for the Library to prioritize its list of endeavors
- Localization: As a citywide system, there are internal and community calls to “double down” on knowing and reflecting local, neighborhood communities.
- Technical and digital proficiency: Technology was present in all scenarios, including in providing optimal technology services, defending against digital attacks, and humanizing technology in an increasingly digital world.
- Partnerships: A strong component of the Library’s positive scenarios was its partnerships with community organizations, and there was a call to increase that activity to achieve positive future outcomes.


A useful foresight activity seeks to blend together important themes of change that must be addressed, along with some more provocative ideas that might be less likely but could have a big impact. This work, we believe, meets that criterion, and will be a useful input to the very important strategic planning work ahead.

The principal components of the project are:

- Framing
- Scanning and Research
- Drivers
- Scenarios
- Recommendations

HOUSTON FORESIGHT FRAMEWORK

Our core process, Framework Foresight, is a systematic way to develop a start-to-finish future view of a domain or topic of interest, to explore its implications, and to develop proposed responses. The framework organizes



the principal components of the project into a logical flow in which each step feeds the next. The cone graphic helps to visualize this flow, so we'll use it as a navigational icon to help readers know where they are in the process. The five steps for this project are:

1. Framing: The Framing step includes scoping the project, defining the focal question, and creating a visual domain map of the important categories to explore
2. Scanning and Research: Scanning is the process of finding, collecting and analyzing signals of change. Research begins with a current assessment and then identifies specific types of information about the future: trends, issues, plans, projections. For the Library, this phase also included interviews and a survey.
3. Drivers: All of the information gathered to this point is synthesized into a set of key driving forces shaping the future of the domain.
4. Scenarios: The drivers are then used as the ingredients or building blocks for developing scenarios. The team used an archetype approach, which uses common patterns of change in domains to map its possible futures. The archetypes we use are:
 - baseline (continuity)
 - collapse
 - new equilibrium (challenge-and-response)
 - transformation.
 - For this project, the additional archetype of a “preferred future,” a desirable future that still meets a plausibility test, was added.
 - Recommendations: Recommendations consist of three principal components:
 1. Strategic Issues are identified for each scenario.
 2. Options for responding or acting are identified.
 3. An Integrated Strategic Approach is developed to provide advice on navigating across the scenario set.

Throughout this report, we will indicate where we are along the Framework cone graphic.

FRAMEWORK FORESIGHT

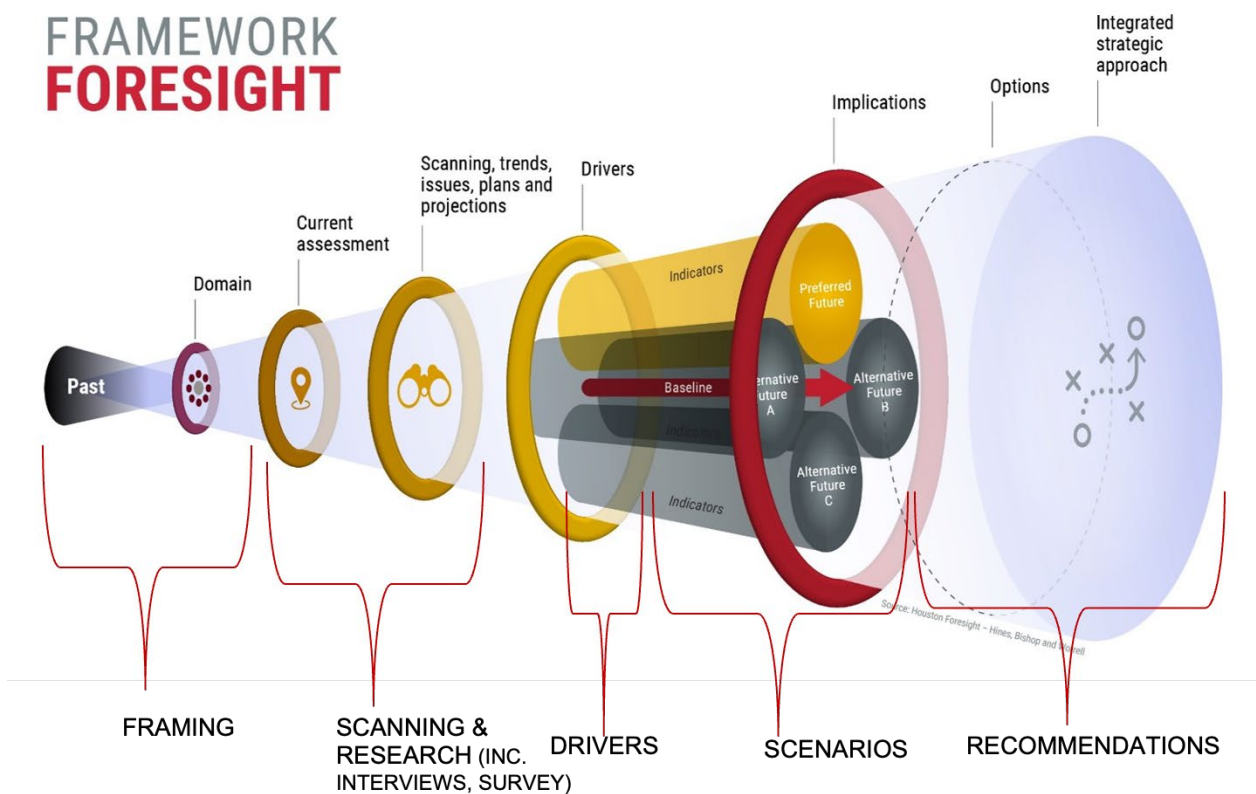


Figure 1. Framework Foresight

FRAMING: THREE HORIZONS

The timeframe for this project is about a 10-year projection into 2032, which is typical of foresight projects. The Three Horizons model is a useful way to think about that time frame and beyond. In short:

- **Horizon One:** the short-term “baseline” or continuity future of roughly the next 5 years in which the current system or way of doing things in a domain largely prevails.
- **Horizon Two:** the mid-term future of “transition” from 5-10 years out in which the existing system is breaking down and new approaches are making inroads.
- **Horizon Three:** the long-term future from the next ten years and beyond in which a “new system” will eventually take root.

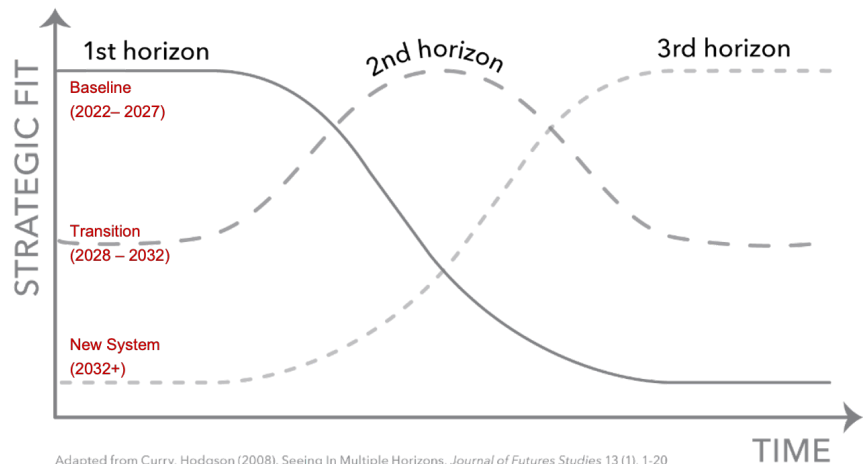
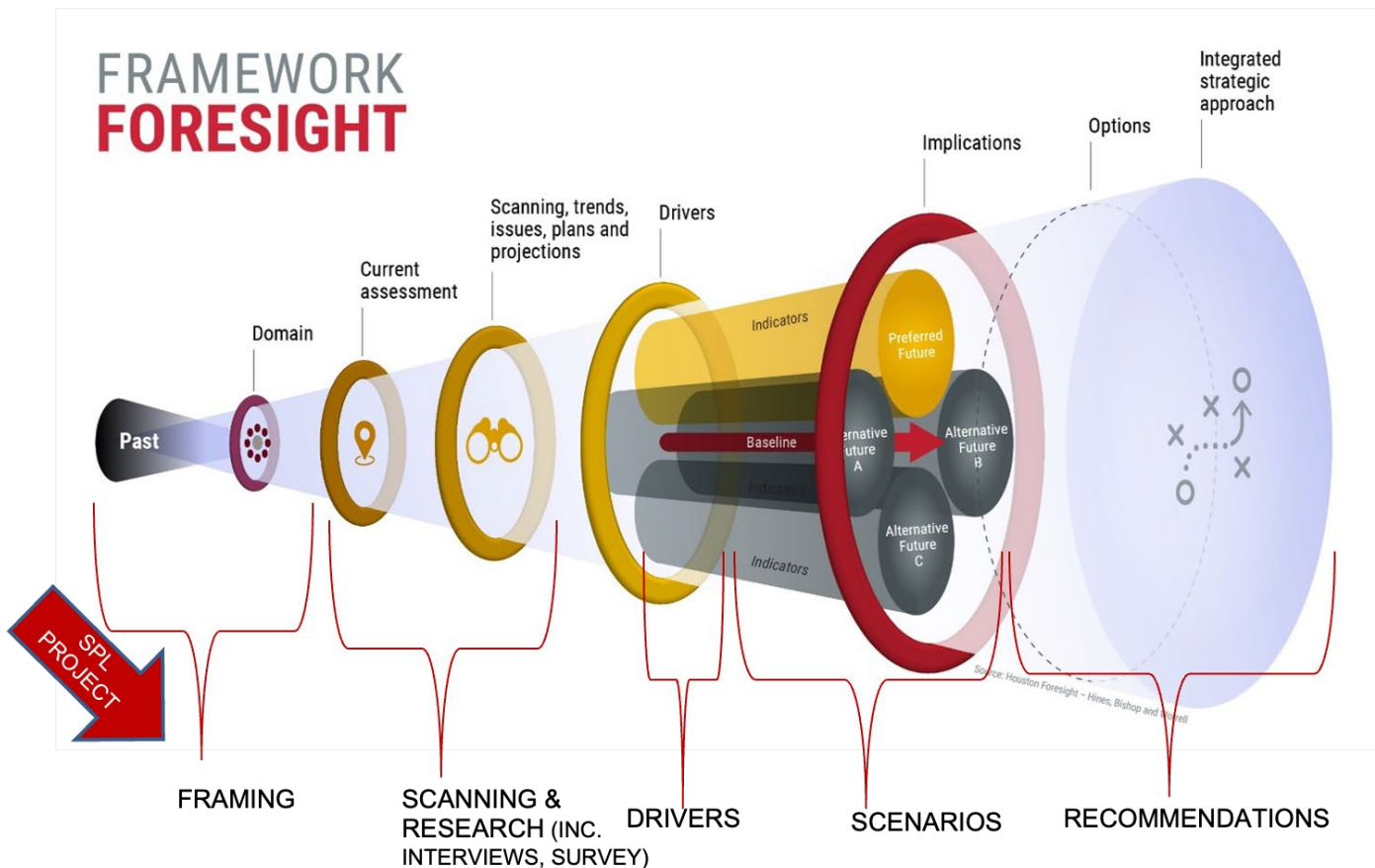


Figure 2. Three Horizons



FRAMING: THE DOMAIN MAP

With the focal question and timeframe set, the domain map establishes the key categories to explore. The domain map is a visual representation of the topic organized by categories and sub-categories. It provides a guide for the research to ensure that key aspects of the domain are adequately covered. The five primary domain categories are:

- **Programs** focuses on Library programs and services for a wide range of audiences and interests, looking across programs that are offered in libraries, online, and out in the community.
- **Community** concentrates on the engagement, needs, and roles of the community in which the Library serves.
- **Collections** explores the Library's items available for public use, such as books, CDs and DVDs, e-books and e-audiobooks, digital music, licensed databases, equipment, and more.
- **Operations** delves into the overall governance of the organization, looking specifically at operations in the Library's virtual and physical spaces. Staffing is a key component of this domain category.
- **Funding** examines the standard and non-standard funding avenues for a library system.

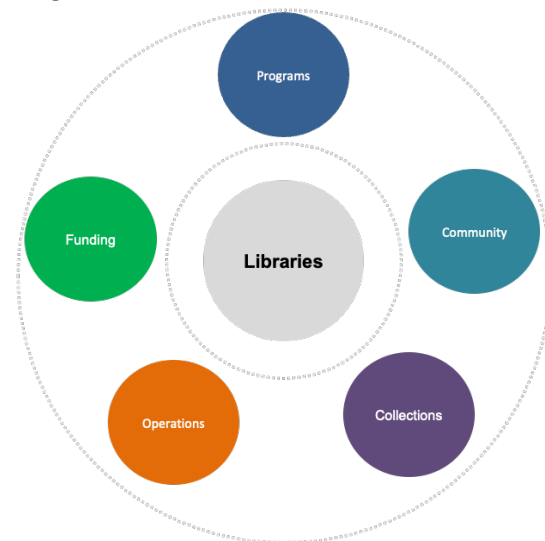
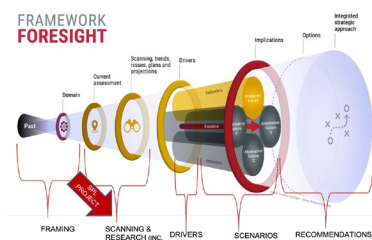


Figure 3. Domain Map

SCANNING

Over 200 scanning hits were collected into our Diigo library. A “scan hit” is an individual piece of information that captures a signal of change.

Figure 4 shows examples of a scanned hit, as well as the top 10 tagged topics from the scanning. The ratio of hits across the three horizons is in line with most foresight projects. The tags also reflect the domain map categories, which suggest the scanning adequately ranged across the domain.



[With Rising Book Bans, Librarians Have Come Under Attack](#)

www.nytimes.com/...book-ban-librarians.html

H1 community operations staff politicization of knowledge

[First Platinum LEED Carnegie Library in Athol |](#)

inhabitat.com/ol-merges-the-old-with-the-new

H2 operations physical buildings LEED platinum

[ASU librarian on a mission to 'reclaim and repatriate' Indigenous knowledge](#)

- 1 views

news.asu.edu/riate-our-indigenous-knowledge

H2 programs knowledge staff inclusivity indigenous arizona

[A culture war is raging against 'woke capitalism' |](#)

www.corporateknights.com/...pitalism-and-climate-investors

H2 operations governance ESG woke capitalism

[At Hillsboro's Library of Things, patrons can check out an experience -](#)

www.opb.org/...ent-things-baking-sewing-music

H1 Community Needs Resources Experiences

[The impact of Artificial Intelligence on librarian services | For Librarians](#)

www.springernature.com/...16874432

H3 Operations staff AI&Bots IAAS

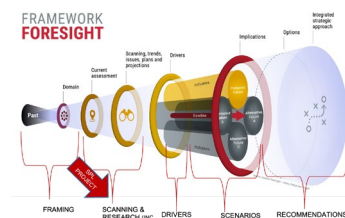
Top 10 Tags	View All
H1	112
H2	88
Community	80
Operations	74
programs	47
needs	38
staff	33
Governance	31
H3	26
Funding	23

Figure 4. Scanning Hits

RESEARCH & INTERVIEWS

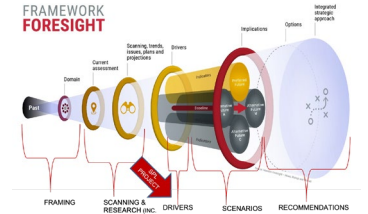
The horizon scanning is supplemented by secondary research to provide additional inputs for the scenario building phase of the project. The research inputs are focused on looking for specific types of information about the future, whereas scan hits capture any kind of signal of change. The specific inputs identified for this project were:

- **Trends** are changes already underway and expected to continue into the future.
- **Issues** are the current controversies or conflicts going on regarding the domain.
- **Plans** are the announced intentions of key stakeholders in the domain.
- **Projections** are publicly available forecasts that others have done on the domain.
- **Interviews/surveys** capture insights from future-oriented questions asked to key internal and external stakeholders.



FOURTEEN DRIVERS OF CHANGE

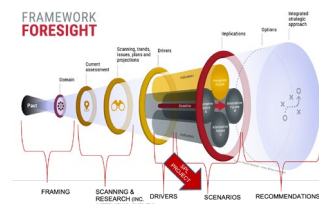
Drivers are the key themes shaping the future of the domain -- in this case, libraries. Drivers are thematic clusters of related changes identified from the horizon scanning, research, and community and stakeholder interviews and survey that are driving or shaping significant change in the domain. The drivers encompass cross-cutting changes that are central building blocks for scenarios. The fourteen drivers identified for this project were:



- | | |
|--|---|
| <p>1</p> <p>Security Concerns
Patrons expect libraries to provide security for various physical and cyber security threats.</p> | <p>8</p> <p>Community Anchor and Incubator
The Library is an extension of the culture of the community they serve.</p> |
| <p>2</p> <p>Money Troubles
Doing more with less continues as demands on the Library increase while financial support is unreliable.</p> | <p>9</p> <p>Culture Wars
Political and cultural battles are being waged against libraries. Library services are the epicenter. A position must be taken, and it can't be of "neutrality."</p> |
| <p>3</p> <p>Controlling the Info
The continued road to intellectual freedom is shaky. Prohibitive access, rising prices, and political squabbles are growing.</p> | <p>10</p> <p>Shades of Green
How green do libraries want to go? From refurbishing buildings, training staff on low carbon footprint, and reducing carbon emissions by increasing remote working & programming. Libraries have a myriad of green options to choose from.</p> |
| <p>4</p> <p>Staffing Issues
Competition for talent and struggles with retention continue as education level and capabilities are reconsidered. A stellar workforce is key for a preferred future</p> | <p>11</p> <p>Changing Governance Models
Demand grows for more effective organizational governance. Governance, assets, and identity are increasingly decentralized.</p> |
| <p>5</p> <p>Social Services & Opportunity Gap
Libraries are community hubs to provide services for social welfare and other programs, yet communities are unwilling or unable to adequately fund these services leaving libraries filling the gap.</p> | <p>12</p> <p>The Next Tech Wave
A new wave of tools is emerging to deal with the exploding availability of (mostly digital) information e.g., AI-based avatars.</p> |
| <p>6</p> <p>Automation & Digitization
From funding, staffing, collections and collections, to community services, tech enables libraries to reach more patrons with augmented and wider ranging services (sometimes at lower costs).</p> | <p>13</p> <p>Library of Things
There may be opportunity to expand the range of products and services that libraries could share (e.g., from laptops to weed wackers).</p> |
| <p>7</p> <p>Reaching the People
Organizations are finding new ways to reach stakeholders/members (e.g. social media, dropping fines, partnerships, automation).</p> | <p>14</p> <p>Local News and Archives
The decline of local news outlets creates a gap in local information that could be filled by libraries.</p> |

SCENARIOS OF LIBRARIES 2032

The Houston Archetype Technique (HAT) selected for the project relies on identifying a set of drivers whose future outcomes are projected in each of four archetype patterns: baseline, collapse, new equilibrium, and transformation. A key assumption underlying this technique is to view the domain as a “system,” operationally defined as “the current way of doing things.”



- Baseline** – *extrapolation of present into the future.* Present trends continue within the system without any major disturbances (i.e., what we call the baseline future). The current system continues to grow in the sense that its present trends continue.
- Collapse** – *a system stuck in dysfunction.* A key point is that collapse does not necessarily suggest the apocalypse, but the system regresses or dips into a level of dysfunction (e.g., economic stagnation or recession as the norm). Of course, it could also be an outright collapse as well.
- New Equilibrium** – *challenge to the system leads to compromise to save the existing way of doing things.* The key notion here is one of challenge and response.







	Not Enough  <p>Despite good intentions, increased expenses mean the library can't keep up with demands, which disappoint the community and the library.</p>
	Libraries for Some  <p>Library services move into the cloud with remaining branches more like shelters than traditional libraries.</p>
	Pushing the Limits  <p>The library dramatically expands its scope of services, and then scales back.</p>
	Taking a Stand  <p>Libraries take a strong stand for community values and intellectual freedom that earns it a key role in bringing the community together.</p>
	Trusted Third Space  <p>Building trust with community through seamless invisible tech, relationship building and equitable resources allocation.</p>
	Ecosystem Anchor  <p>The library is able to return to its roots as the guides to the world of information as social services and other direct provider services are distributed to other organizations in the community ecosystem that are more qualified to handle them.</p>

Figure 5. Scenario descriptions

The system is challenged and responds in a way to save itself. It's based on the notion that systems are stable and will tend to – and want to – return to baseline after being disturbed. They will actively seek this return to stability and be willing to make some compromises in order to preserve the essence of the system (e.g., bailing out the banks at the onset of the Great Recession).

- Transformation** – *can't save the system, so we rewrite the rules of the game.* Transformation entails fundamental change to the system. This transformation could be driven by any number of factors,

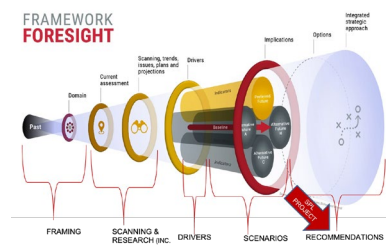
including but not limited to values, technology, or economics. The key point is that it essentially involves creating new operating rules or guidelines.

- **Preferred** – *the system moves in a visionary/preferred direction.* This is not one of the traditional archetypes but works the same way in that driver outcomes are projected within the guidelines of the best plausible result. The preferred scenario is formed based on the preferred or visionary direction of the client.

IMPLICATIONS, ISSUES, OPTIONS, AND STRATEGIC APPROACH

The UH foresight team, in conjunction with the SPL core planning team, took the following steps to develop recommendations for action:

- Brainstorm potential implications from each scenario that may impact Library programs and services, collections, and operations.
- Cluster together related themes from those implications into broader strategic issues.
- Design an option (a strategic response) for each issue.
- Develop an integrated strategic approach that suggests an overall approach or strategic direction that addresses the full landscape of that scenario.



Implications provide ideas, or raw material, from which to construct strategic **issues**, whether it be a threat or an opportunity. The strategic issues provide a sharper focus on what ought to be addressed. Our experience as futurists suggests that, while identifying strategic issues is a good and useful activity, its value is greatly enhanced by exploring what can be done about them, which we refer to as **options**. Options are high-level strategic responses to the strategic issues. The strategic options provide specific potential action responses for each issue. The overall **strategic approach** strategizes how to respond and navigate across the entire scenario landscape and identifies likely and desirable strategic directions or pathways to the future.

In two Implications Workshops – one with SPL staff and one with Seattle community representatives – we generated implications and spent time fleshing out the most important implications by developing an Elevator Speech Response. The table below is a list of the most imperative issues facing the Library as identified in these workshops, and an abbreviated list of options/responses to address them. In [Appendix 3](#), these issues and options are explained in detail within the Elevator Speech Response framework.

The report concludes with “Provocations to Monitor.” Sometimes there are one-off pieces of research or weak signals that are incredibly interesting and provocative but because they are so weak, they are not captured in drivers and scenarios. While they do not demand immediate attention, we recommend monitoring them separately to see if or when they develop.



Scenario	Issue	Option
Baseline	Funding shortfall	Prioritize!
Baseline	Reducing buying power for collections	On Demand Collections
Baseline	Keep programs afloat	Programs for the Future
Baseline	If we have to cut something...	Shared services
Collapse	Losing patron who rely on physical access (don't have virtual)	Humans First
Collapse	Collections outpace funding (way too expensive)	Prioritize!
Collapse	Beefing up security	Safe House
Collapse	Big boost in virtual capabilities	Geek Squad
NE	Collection Scope	Library of Things (LOT)
NE	Space usage	Tear down the [cubicle] wall
NE	Staffing challenges	Holistic model
NE	Wealthy donor temptation	Stick to our values
NE	Expand and include	Don't forget the core
T1	Different community needs	Hyperlocalization
T1	Digital Divide	Digital access for all
T1	New Competition (Here come the privates)	Private Eyes
T1	Bring community together	Convenings-R-Us
T2	Staffing	Data-driven Staffing Solutions
T2	Data handling/privacy concerns	Virtual refuge
T2	Help community learn new tech	Incubator
T2	Metaverse as interface	Getting ahead of Metaverse
Preferred	Other agencies relying on library	Community hub/convenor
Preferred	Environmental "stance"	Shades of green
Preferred	More effective partnerships	Relationship manager model
Preferred	Prioritize partnership	Strategic allies
Preferred	Reimagining physical space	Tech centers
Community Preferred	Communicate & measure success	Co-design
Community Preferred	Meet specific community needs	Hyperlocal

Figure 6. Issues / Options

Strategic Approach

A good foresight project provides a sense of direction for moving into the future. It should be emphasized that organizations do not get to choose their scenarios, but rather choose how they will respond to the various scenario possibilities. The logic of scenario planning is to be ready for whichever way the most plausible combinations play out.

After the workshop, the teams analyzed these issues and discovered that there were seven cross-cutting topics (robust issues) – the “Super Seven” – that were important to address in all six scenarios:

- Equity
- Staffing
- Space
- Prioritization
- Localization
- Technical and digital proficiency
- Partnerships

The graphic is of the strategic approach. We would recommend SPL choose to focus on the Super Seven pillars, develop a winning strategy for each, and become resilient and / or flourish in any scenario they find themselves.

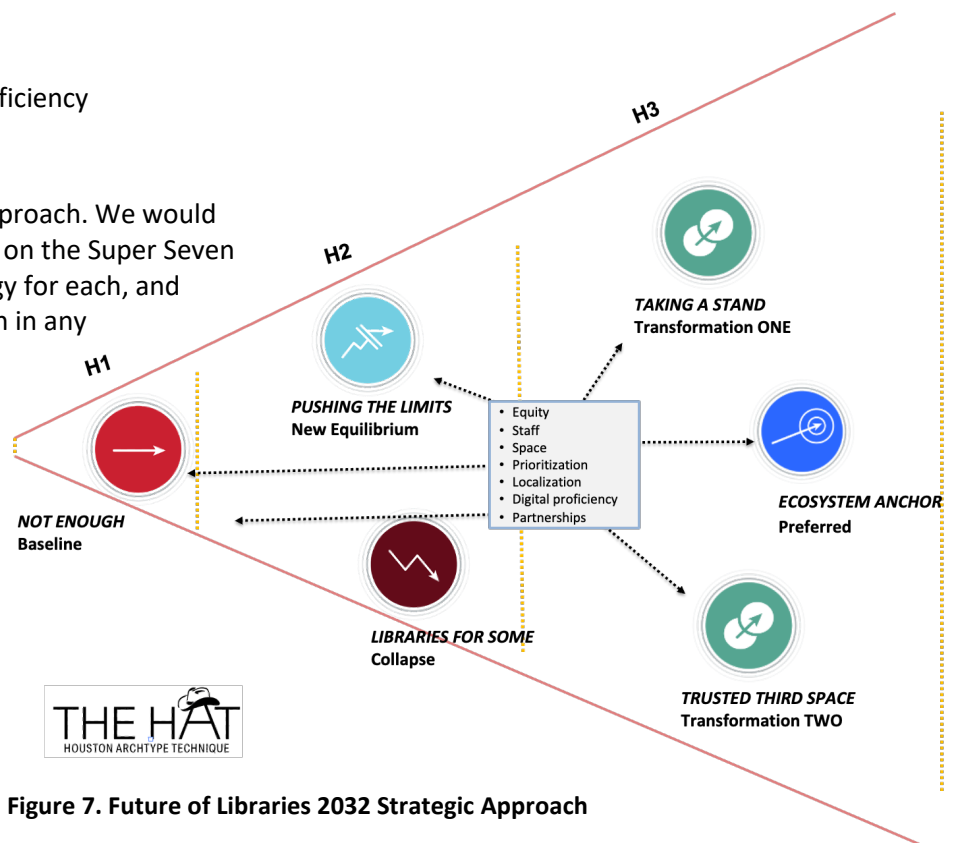


Figure 7. Future of Libraries 2032 Strategic Approach

INTRODUCTION

The Seattle Public Library (SPL) asked Houston Foresight to use scenario planning to help explore the future of libraries into 2032. The purpose of developing this long-term view was to identify and build support in the present towards a preferred future, as a compelling, plausible, and positive view of the future can inspire and motivate action in the present. At the same time, the potential for less desirable or negative futures was explored as well. A balanced view of the future includes both:

- Where do we want to go? (positive vision)
- What do we need to avoid? (potential trouble spots)

The project used Houston Foresight's Framework Foresight method for exploring the future, along with a series of exploratory scenario and implications workshops to engage the SPL community in the process. A scenario landscape of six potential futures was developed in order to identify strategic issues, options for responding to them, and to suggest an integrated strategic approach to the future. Houston Foresight Program Coordinator Andy Hines was the Principal Investigator, assisted by Project Lead Laura Schlehuber; alumni April Koury, Garry Golden and JT Mudge; and current students Christopher Solomon, Kiran Carpenter and Rich Erwin.

The principal components of the projects are:

- Framing
- Scanning and Research: Current assessment, Trends, Issues, Plans, Projections and Community/Stakeholder Interviews and Survey
- Drivers
- Scenario Development
- Recommendations: Issues, Options and Integrated Strategic Approach

While much of the research and fine-tuning of each of these steps was conducted by the Houston Foresight team, SPL participated in interviews, a survey and scenario development workshops, as well as multiple implications workshops, providing expert insight and feedback every step of the way. This not only enhanced the overall project work outcomes but provided SPL the opportunity to develop their own strategic thinking and foresight skillset.

FRAMING & SCANNING

The first step is to develop a focal question to guide and focus the project. A scenario planning study is framed around a focal issue. The team chose: **What are the potential futures of libraries... and what can we do to achieve a preferred future?**

The timeframe is an approximate 10-year projection to 2032, which is a typical timeframe for future projects. The Three Horizons model is a useful way to think about timeframe. In short:

- **Horizon One:** the short-term “baseline” or continuity future of roughly the next 5 years in which the current system or way of doing things in a domain largely prevails.
- **Horizon Two:** the mid-term future of “transition” from 5-10 years out in which the existing system is breaking down and new approaches are making inroads.
- **Horizon Three:** the long-term future from the next ten years and beyond in which a “new system” will eventually take root.

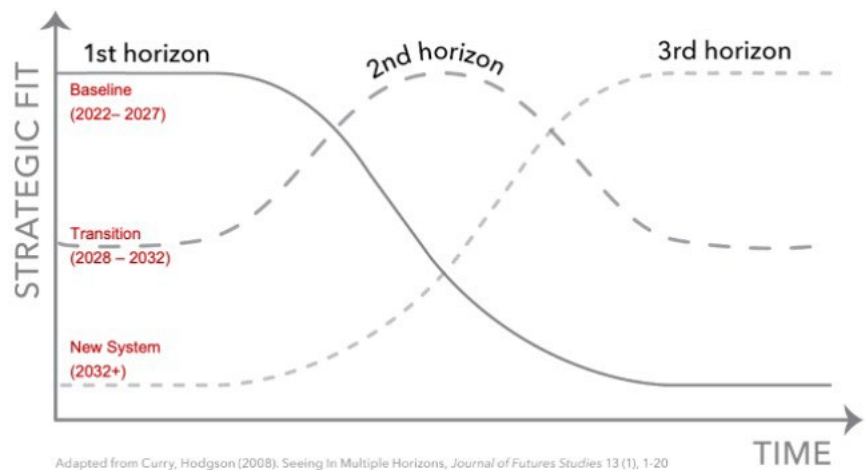


Figure 2. Three Horizons

The 10-year timeframe enables the exploration of a new approach to what libraries might look like, while also mapping the transition pathways.

The geographic focus was the greater Seattle area, but we also looked across the US and globally for relevant examples and insights.

DOMAIN MAP

With the focal question and timeframe set, the Houston Foresight team, in collaboration with SPL, created a **domain map** of key categories. The domain map is a visual representation of library topics organized by categories and sub-categories. It provided a guide for the research to ensure that key aspects of the topic are adequately covered. The five primary domain categories are:

- **Programs** focuses on library programs and services for a wide range of audiences and interests, looking across programs that are offered in libraries, online and out in the community.
- **Community** concentrates on the engagement, needs, and roles of the community in which the library serves.
- **Collections** explores the library items for public use such as books, videos, sound recordings, licensed databases, and equipment.
- **Operations** delves into the overall governance, looking specifically at operations in the virtual and physical space, and staff.
- **Funding** examines the standard and non-standard funding avenues for a library system.

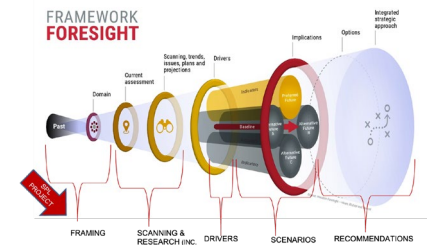
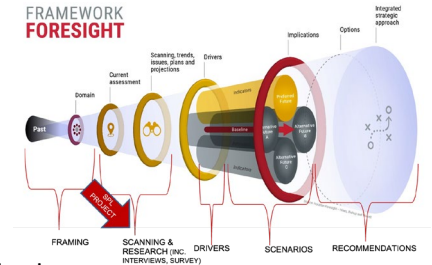


Figure 3. Domain Map

The domain map focuses on the topic of libraries. We also considered the larger context for SPL and libraries using STEEP – **S**ocial, **T**echnological, **E**conomic, **E**nvironmental, and **P**olitical – categories to look for forces and factors outside of the domain that may influence its future. Our experience as futurists suggests that many times, the most significant changes or disruptions to a domain come from outside of it, such as an economic boom or bust, a regulatory swing, design or style shifts, or a new technological development.

HORIZON SCANNING

Horizon scanning involves the identification, collection, and analysis that capture the “signals of change.” A “scan hit” is an individual piece of information that captures a signal of change. They may be news or journal articles, blog posts, videos, reports, etc. The signals have varying degrees of evidence to back them, that is, strong signals of change are supported by multiple and credible sources. In contrast, weak signals have less support, and there are typically lots of them. While a well-rounded horizon scanning process includes both, there is a preference for the weak signal, as they provide clues on how the domain might change, whereas the strong signals typically confirm what is already happening.

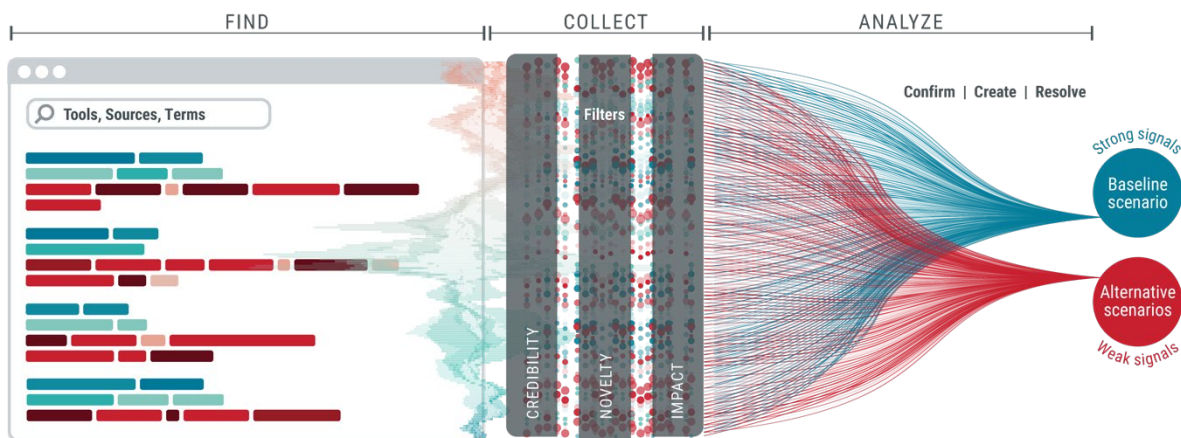


We strove for breadth and depth in our scanning to access a wide range of sources, from specialized outlets like *American Libraries Magazine*, *Library Journal*, and *Seattle Times*, to international and local media websites like *Reuters*, *AP*, and *Bloomberg*. We also indicated in which of the three time horizons the suggested change was projected to take place in.

The domain map provides a framework for organizing and guiding the horizon scanning. Individual team members were assigned responsibility for scanning for changes using the domain map categories above as a guide. More than 200 scanning hits were collected into a cloud-based library (Diigo) for annotation. The team met regularly to discuss and probe deeply into their potential implications and interactions. In our age of abundant information, it is less about finding a piece of information that no one else can find, and more about understanding the impacts, so that the information can be acted upon in a timely and strategic manner.

The Houston Foresight horizon scanning process uses three basic steps:

SCANNING PROCESS



Scanning process graphic representation

- The first step, **FIND**, is the process of searching for and identifying potential scanning hits. It uses the domain map categories as jumping-off points to organize the search.
- The second step, **COLLECT**, is the process of capturing the resulting scan hits. We use an online, cloud-based bookmarking website, or library, called Diigo, which captures files or website links in a common location with annotations. Each entry is also tagged based on the domain map categories to ease information retrieval.
- The third step, **ANALYZE**, uses a simple triage to decide whether to include a scanning hit in the library. When included, the scanner includes a brief commentary on why they thought it was interesting and relevant. A more detailed evaluation of the hits takes place when crafting the drivers.

Figure 4 shows a scanning hit, and the 10 most popular topic from the scanning. As we would hope, the tags reflect a mix of domain map categories, suggesting a balanced approach covering key topics. The ratio of hits across the three horizons is also in line with most foresight projects.

[With Rising Book Bans, Librarians Have Come Under Attack](#)

www.nytimes.com/...book-ban-librarians.html

H1 | community | operations | staff | politicization of knowledge

[First Platinum LEED Carnegie Library in Athol](#)

inhabitat.com/ol-merges-the-old-with-the-new

H2 | operations | physical | buildings | LEED | platinum

[ASU librarian on a mission to 'reclaim and repatriate' Indigenous knowledge](#)

- 1 views

news.asu.edu/riate-our-indigenous-knowledge

H2 | programs | knowledge | staff | inclusivity | indigenous | arizona

[A culture war is raging against 'woke capitalism' |](#)

www.corporateknights.com/...pitalism-and-climate-investors

H2 | operations | governance | ESG | woke capitalism

[At Hillsboro's Library of Things, patrons can check out an experience -](#)

www.opb.org/...ent-things-baking-sewing-music

H1 | Community | Needs | Resources | Experiences

[The impact of Artificial Intelligence on librarian services | For Librarians](#)

www.springernature.com/...16874432

H3 | Operations | staff | AI&Bots | IAAS

Top 10 Tags	View All
H1	112
H2	88
Community	80
Operations	74
programs	47
needs	38
staff	33
Governance	31
H3	26
Funding	23

Figure 4. Scanning hit example from Diigo

RESEARCH

The horizon scanning is supplemented by research to provide inputs to scenario building. The research inputs are focused on specific types of information about the future, whereas scan hits capture any kind of signal of change. The specific elements identified for this project were:

- **Current Assessment:** The current assessment summarizes key developments in the present that may suggest future developments.
- **Trends:** Trends are changes already underway and expected to continue into the future.
- **Issues, Plans, and Projections:** Issues are the current and emerging controversies in the domain; plans are the announced intentions of key stakeholders; and projections are publicly available forecasts about or related to the domain.
- **Interviews/Survey:** Key internal and external stakeholders are interviewed and/or surveyed using a set of futures-oriented questions.

CURRENT ASSESSMENT

The current conditions listed below capture key factors describing the present of the domain. They are often referred to as the “hot topics” people within the domain are talking about. The current assessment is used by the research teams to ensure that they are properly grounded in what is happening in the present before moving into the future. Links are provided for those that want additional information.

Current Conditions

Programs (knowledge, inclusion, special space)

Accessibility is still an important topic for libraries. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

Libraries are attempting to increase access, regardless of ability to pay, which increases the requirements and **costs** necessary to meet such needs. ([link](#))

Privacy in the midst of providing materials for patrons may increasingly become an issue. ([link](#))

Almost one-third (32.6%) of public libraries offer internet **hotspots** for check out. ([link](#))

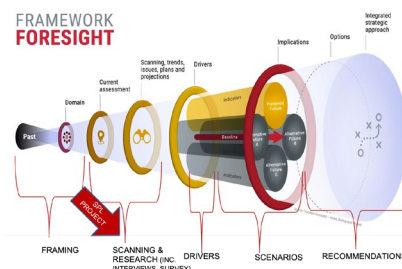
More than 88% of all public libraries offer some kind of formal or informal **digital literacy** programming. ([link](#))

One in five public libraries (20%) provide access to **3D printers**. ([link](#))

Makerspaces (e.g., laser cutting, computer programming, 3D printing, self-publishing, welding, and collaborative work spaces) are flourishing. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

In general, people appreciate their public libraries, but are **unaware** of all services available. ([link](#)) ([link](#))

Many librarians, including the newly elected head of the American Libraries Association (([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)), are determined to deal with multiple **environmental issues** ([link](#)) and **social issues** as they relate to media and libraries. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))



Community (needs, roles, perspectives)

Determining reasonable **pricing** for library access to digital media has often been problematic. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

Libraries are stepping up to fill in some **healthcare gaps**, and it comes with challenges. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

Libraries are often on the front line of **homelessness** and **mental illness**. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

23% of adults in the US had **not read** a book in 2020. ([link](#))

Positive feedback: Research Center shows that 76% of adults say libraries serve the learning and educational needs of their communities either “very well” (37%) or “pretty well” (39%). Further, 71% say libraries serve their own personal needs and the needs of their families “very well” or “pretty well”. ([link](#))

73% of adults say the label “**lifelong learner**” applies “very well” to them. Additionally, 74% of adults have participated in personal learning experiences in the previous 12 months. 63% of full- and part-time workers have taken courses or done training on the job to improve their skills in the past year. ([link](#))

Millennials are the largest age cohort using libraries. ([link](#))

Several pieces discuss libraries stepping in as a “**third space**” for education and filling a gap. ([link](#)) ([link](#)) ([link](#))

For many children in the US, **reading for fun** has become less common. ([link](#))

Society has an **attention span** issue. ([link](#)) ([link](#)) ([link](#))

The newest generation of **librarians** are well versed in Information Science, but increasingly they need to be well versed in community engagement, advocacy, marketing services, attempting to improve the social impact of their library for its community, and do so within a reasonable set of ethics and values. While there are some institutional capabilities in place, practice is typically more difficult than process. ([link](#))

Collections

Digitization is necessary and a challenge. ([link](#)) ([link](#)) ([link](#))

Library systems directly making use of **cloud technology** may reduce costs and increase visibility and access of collections. ([link](#)) ([link](#)) ([link](#))

Censorship battle incidents... ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

Deaccession is likely to become a focal point regarding what is retained within public libraries. ([link](#))

Public libraries will need to ensure they minimize any risk generated by unwittingly facilitating **predatory publishing** through their systems. ([link](#))

Operations (governance, staff, physical, virtual)

Staff

Public library staff are experiencing **high rates of trauma** at their workplaces. ([link](#))

Libraries have also been impacted by the **Great Resignation**. ([link](#))

Library workers are uniting and **unionizing** across the nation. ([link](#)) ([link](#))

Demand for **telework** increases, and many workers do not want to go back to the office if they are able to perform their primary job function(s) remotely. ([link](#)) ([link](#)) ([link](#))

- **Telework may help reduce trauma related to in-building work*
- *Currently at SPL some staff are approved to telework up to two days per week.*
- *Some SPL staff would prefer to be allowed to telework more since some jobs can be performed almost entirely off-site.*
- *SPL provides technology options that can assist in teleworking.*
 - *Some SPL staff had desktop computers replaced by a tablet (Surface) and carry it back and forth to the office.*
 - *Some SPL staff have laptops (more robust than a tablet)*
 - *Many SPL managers have work-issued cell phones.*
 - *SPL provides cameras for online meetings or upgraded computers (especially desktops)*
 - *Hybrid meeting room technology that can accommodate both in-person and remote meeting when attendance is needed.*

Governance, Physical, Virtual

Those services most likely to use **cloud technology** for libraries are consolidating. ([link](#)) ([link](#)) ([link](#)) ([link](#))

More **training** is needed learn how to provide more inclusive solutions. ([link](#)) ([link](#))

More than one-third (36.7%) of public libraries have dedicated staff for **digital literacy** and technology programs and training. ([link](#))

(Mostly) conservative groups are attempting to **ban or restrict** access to various media and gain control of library boards. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

**Bullets in italics do not have supporting links as they are statements from experts inside SPL*

Funding (traditional, non-traditional)

Many options for non-governmental **grants**... ([link](#)) ([link](#))

Trump Administration minimized and unsuccessfully attempted to end funding of the IMLS and LSTA, the primary **Federal programs for libraries**, and the Biden Administration's improvements have been modest at best. ([link](#)) ([link](#)) ([link](#)) ([link](#)) ([link](#))

Libraries are still considered a good **investment**. ([link](#)) ([link](#)) ([link](#)) ([link](#))

...but as with any close and significant relationship within a community, **it's complicated**. ([link](#))

Stakeholders


Stakeholders are actors that have a direct or indirect influence on the domain topic. By identifying and studying the stakeholders, futurists are able to conceptualize systems and understand the relationships and forces at play that may impact the future.

- **Current patrons** - their key needs include quality and variety of materials and convenient hours.

- **Potential patrons** there may be a need for facilities in currently unserved areas or questions on whether current services meet their needs
- **Library staff** - serve the public professionally and offer impactful programs that are recognized as useful by the community.
- **Cultural and special interest organizations as partners** - museums, arts organizations, science groups, and other interest-based groups are potential advocates and partners.
- **Community-based organizations** - organizations that serve the city's most vulnerable populations – often those that could benefit most from library services.
- **Donors and volunteers** - typically heavy library users who believe in, and actively support, the mission of the organization.
- **Other partners**
 - **Local government agencies and businesses serving the community.**
 - **People of influence** - politicians, policy makers, and their staff; religious institutions; local service clubs and organizations, including Friends of Library groups; and library commissioners and trustees
 - **Educational partners** - schools, teachers, home schools, charter schools, public schools, private schools, parochial schools, preschools, daycare centers, afterschool programs, and tutors
 - Collaborations with **news services** ([link](#))

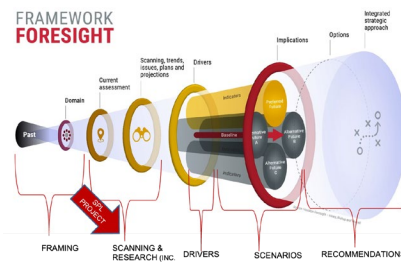
Recent History

- | | |
|-------------|--|
| 1998 | "Libraries for All" bond measure: Seattle voters in 1998 approved the largest library bond issue than ever submitted in the US. The landmark "Libraries for All" bond measure proposed a \$196.4 million makeover of The Seattle Public Library system. It garnered an unprecedented 69 percent approval rate at the polls. The massive measure doubled the square footage in the Library system and resulted in four new libraries in communities without library service; the replacement, expansion, or renovation of 22 existing branches; and a spectacular new Central Library. "Libraries for All" was completed in 2008. (link) |
| 2004 | Seattle's Race and Social Justice Initiative: Seattle committed to eliminate racial disparities and achieve racial equality, focusing explicitly on institutional racism. Race and social justice are key priorities for the Library. (link) |

- 
- 2010** **Museum and Library Services Act of 2010:** On December 22, 2010, President Obama signed into law the Museum and Library Services Act of 2010. The new law reauthorizes the existing programs of the Institute of Museum and Library Services with some important changes. The updated language calls on IMLS to take an active role in research and data collection and to advise the President and Congress on museum, library and information services. This Act also clearly recognizes how libraries and museums contribute to a competitive workforce and engaged citizenry. New language focuses on the development of essential 21st century skills. ([link](#))
- 2012** **Seattle Library Levy, August 7:** Seattle voters approved a \$123 million Library levy to supplement city funding and preserve the investment in the 1998 "Libraries for All" bond measure. The levy was to provide \$17 million annually to stabilize funding and address four areas identified by the community: keep libraries open, more books and materials, improve computer and online services, and maintain buildings. ([link](#))
- 2015** **Wi-Fi Hotspots:** Wi-Fi hotspots are made available for the public to borrow. Wi-fi access has become a core service. ([link](#))
- 2019** **Seattle Library Levy, August:** Seattle voters overwhelmingly approved a seven-year, \$219.1 million renewal of the 2012 levy to support basic operations, as well as fund an increase in operating hours, e-materials, and early learning programs. It also funded the elimination of daily overdue fines, which began in January 2020, reinstating an estimated 52,000 accounts. ([link](#))
- 2020** **Covid closure, March:** The Seattle Public Library temporarily closed all physical locations due to the COVID-19 pandemic and transitioned many in-person services online. ([link](#))
- SPL Library of the Year:** The Seattle Public Library was named the 2020 Library of the Year by Gale/Library Journal for efforts to center equity in its work and prioritize underserved members of its community. ([link](#))

TRENDS

Trends are statements about a change and the direction it is moving. They are helpful in exploring the future because they exist in the present and provide a sense of momentum into the future. Team members were tasked with identifying trends specific to libraries using the primary domain map categories as an organizing frame. The team also identified general contextual trends operating outside the SPL domain that are captured in the STEEP (social, technological, economic, environmental, and political) categories. Trends are a key input used to craft the drivers of change that are, in turn, the building blocks of scenarios.



Domain Specific Trends

Funding

Temporary Budget Growth Spurt? – On average, library operating budgets across the nation rose 3%, material budgets up 1.3% and personnel budgets increased by 4% from 2020 to 2021, due to an influx of federal dollars. Only time will tell if those gains are sustainable. ([link](#))

The Age of Streaming Media - Libraries are seeing a new rise in streaming media spending up 23.5% from 2020 to 2021. ([link](#))

Dollars Up - It's never been more expensive to operate a library, with the average operating costs nationally coming in at \$766k, up 17.35% since 2014. ([link](#))

Government Falling Short - Government funding has failed to cover annual expenses for public libraries for the past 27 years, with 85.7% of funding coming from local budgets, with government funding dropping 13.14% since 2014. ([link](#)) ([link](#)) ([link](#)) ([link](#))

The DAO's Have It - Decentralized autonomous organization (DAO) assets skyrocketed by \$8B between June and September 2021 in just the top 20 DAO's, with over 978,000 members crowdsource funding thousands of projects. ([link](#))

Programs

Make Space for Maker Spaces - One middle school library in Ohio partnered with the local public library to consolidate their collections and converted their library into a maker space, which increased library utilization by 1,000%, while increasing their students access to a larger book collection through Inter Library Loans. ([link](#))

King County, Overdoses on the rise - Since 2019, there have been 42 likely overdoses in or outside of libraries in King County, including 16 confirmed inside library branches, with 8 overdose deaths in libraries since 2017; all while overdose related deaths have skyrocketed 118% over the past decade. ([link](#)) ([link](#))

Community Job Hunt - From 2011 to 2015 job search and application assistance at public libraries grew by 25% to encompass 73% of all libraries. ([link](#)) ([link](#))

Participation Counts - In the 5 years prior to COVID quarantines, libraries nationwide saw program participation increase by 19.3 million people, with the average annual program attendance of 117.3 million people across the same span. ([link](#))

The Right Tool for the Job - In 2009, San Francisco hired the first ever library social worker. A decade later, 40 other libraries employ dedicated professionals trained to handle the needs of patrons. Until more are hired, librarians will continue to fill that first responder role. ([link](#))

VR Exponential Ramp Up - At one library, after an initial slow start, the demand for VR enhancement of programing grew from a single program to enhance 40 additional programs in less than a year. ([link](#))

Device Availability - Libraries are increasing availability of devices that allow for increased digital media usage through grants and corporate partnerships. ([link](#)) ([link](#))

Community

WA Homeless Rates Rising - A HUD report found Washington State experienced a 6.2% increase in homelessness between 2019-2020, a rate of 30 out of every 10,000 people. ([link](#))

Reading Scores Dropping - A 2011 study found that 3rd grade reading scores declined every year since 2006 in underserved communities. ([link](#))

Leisure Reading is Dwindling - Between 2004 and 2017, the average reading time of Americans dropped by 6 minutes from 23 minutes to just 17 minutes. The number of Americans reading for leisure collapsed from 28% to 19%. ([link](#))

The Age Old Proverb - Since 1950, the United States population aged 65 and older has been increasing (as a percentage of the total population) from 8.1% in 1950 to 12.8% in 2009 and could increase further to 20.2% by 2050. Likewise, libraries are offering more programs designed to serve this community. ([link](#))([link](#))

Partnering for the Community - Over the last decade there has been an increase in partnerships between libraries and other organizations that serve communities such as housing projects, rec centers, licensing centers, and community gardens. ([link](#))

Values Warfare - 2022 has seen a consistent increase in attacks on libraries based on values, with some groups pushing for program cancellations with threats of violence against libraries, staff and patrons. ([link](#))

In Libraries We Trust - Study after study reaffirms that libraries are one of the most trusted sources of information while other institutions have been in steady decline. With the rise of fake news and misinformation, libraries are uniquely positioned to help communities decipher fact from fiction. ([link](#))

Collections

Physical Shrinkage - Fairfax Public Library System has seen its collection shrink by 440k books over the past decade. ([link](#))

Digital Collection Boom - 2019 saw a 20% year-over-year increase in digital material use rate by public library customers, reaching an all-time high. ([link](#)) ([link](#)) ([link](#))

Diversity Audits Yield Results - With libraries undertaking diversity audits of their collections, one library found an initial rate of 15% diverse titles, with increases of over 10% year-over-year after focused collection development. ([link](#))

Physical to Digital Shift - From 2014 to 2018, average spending on physical materials in collections decreased by 6% while spending on electronic materials access in collections rose by 31%. ([link](#))

Peer Reviewed Favor - Support for teaching and learning through library collections, reference, and instructional outreach grew 11% from 2019-2020. ([link](#))

Storytime - Audiobooks are on the rise and expected to continue as such. As a percentage of digital interactions, they have increased from 4% in April 2019 to 16% in April 2022. ([link](#)) ([link](#))

Over-Subscribed – Content providers are increasingly eliminating purchase options for media, which negatively impacts the growth of physical collections. ([link](#))

Operations

Library Usage Declining - In the US, prior to the COVID-19 pandemic, public library building use fell 31% between 2010 and 2018. ([link](#))

Libraries Losing Staff - Aside from a single year spike in employment in 2019, libraries have been showing consistent downward trends in losses of. ([link](#))

Book Bans – In 2021, there were 729 challenges leading to 1,597 books banned in some libraries, double the number from 2020, and the highest number in the past two decades of statistics...until 2022 when in the first 9 months of the year, book challenges almost matched 2021's total and were 33% higher than 2018-2020 combined. ([link](#))

Shadow Academics - An analysis of 12 leading journals found that if articles were on the shadow library Sci-hub, citations to the articles rose 1.72 times; additionally, downloading of copyrighted materials takes up 24% of global bandwidth with a marked increase due to the COVID-19 quarantines. ([link](#)) ([link](#)) ([link](#))

AR Intervention - AR adoption is increasing in all sectors, opening new areas of use. Children exposed to AR reading experienced improvement in peer and teacher interactions as well as increased learning of language. ([link](#)) ([link](#))

Digital Lending - The number of digital books borrowed from schools and libraries in 2020 tallied 506 million, up by 16% from 2019. ([link](#))

Decentralized Future - There has been an increase in web3 adoption; from 2020-2021 adoption grew 250%, due in part to the privacy, democratic governance, and forward-thinking ideas, all things that are core library tenants. ([link](#))

STEEP Trends

Social

Social movements calling for equity, recognition, and even reparations continue to dominate the social landscape.

The effects of the pandemic continue to be felt as inequalities related to care fuel further calls for social justice.

Declining trust in national and global institutions continues to accelerate social polarization.

More broadly, ongoing social trends – from marriage rates declining to many seeking to "simplify" their lives – continue to shift urban landscapes.

Health and wellness take center stage as technology, more access to remote care, and even community help empower individual healthcare.

Technology

Next-generation consumer electronics support constant connectedness through a range of devices, including wearables and the "internet of things," which are driven by the 5G boom.

Acquiring, storing, and securing data is a top strategic priority across a range of sectors. While some capitalize on new career opportunities, many face an uphill battle to either up-skill or drop out of the workforce.

Smart and "green" tech drive a boom in materials and approaches to construction at a variety of scales, including 3D printing, AI, and automation and prediction systems.

Institutions are rapidly digitalizing, although it is clear that they are ill-equipped to deal with trends such as digital media manipulation and the online blurring of truth.

Automation, intelligent virtual assistants, and augmented reality continue to reshape the service landscape as their costs fall.

Economic

The knowledge economy is driving a move away from ownership of resources – including physical assets such as space and technology, people, and even intellectual property (IP)– and toward greater sharing, such as with fractional ownership. Some consumers are moving beyond the "access over ownership" idea and experimenting with collaborative consumption. More broadly, calls for "moral capitalism" grow amidst an increasing awareness of the financial costs of climate change.

Employees are asking for more flexible work hours, and employers are providing more flexible-hour opportunities. In the last five years, especially in light of the pandemic, this trend has picked up and is continuing as more Gen Z and Millennials become a larger portion of the workforce.

At a national level, an aging workforce compounds the effects of an equally aging infrastructure, and both highlight the forthcoming retirement crisis, talent shortage, and effects of global competition.

Platforms for collaboration and remote work reorient not just the "knowledge economy" but have broad impacts and effects across a range of sectors.

Income inequality and the shrinking middle class haunt the economy. Some economists worry that the U.S. middle class is weakening due to falling wages, stagnant unemployment, and declining benefits and social supports. Income inequality and the racial wealth gap are growing.

Environmental

Climate change dominates all conversations about environmental trends. Low-income communities continue to be more exposed to environmental hazards and take longer to bounce back from natural disasters. Food and water costs are expected to continue to rise in the face of environmental floods, droughts, and disasters.

Growing concerns over food and water drive action, and cities are seen as central to the success of zero waste solutions.

Regulatory and legal contexts become more complex as new forms of "rights" emerge and are ascribed to non-human entities.

The circular economy emerges as a new paradigm, driving clean tech investment and highlighting the need for low carbon materials and building methods.

Political

Governments and institutions struggle to confront the growing trend of data breaches and privacy concerns as cyberattacks of various scope and scale proliferate.

Trust comes at a local level, although threats (both foreign and domestic) demand national and transnational cooperation.

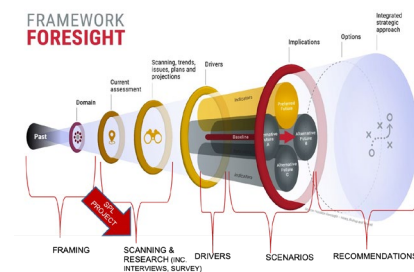
Governing by and through data and "nudge" approaches to policy continue to grow in popularity.

As governments look inward to address challenges at home, a new wave of neo-protectionist policies has the potential to spark further tensions at a global scale.

This list of STEEP trends and their relevant links is found in [Appendix 4](#).

ISSUES

Current and emerging issues may lead to a choice(s) that influences the trajectory of the future. By analyzing these issues, we can explore the different paths the future may take. There are a significant number of current issues across the United States that directly relate to the future of libraries.



Operations

- **Physical vs digital** - Will staff work in libraries or work from home? Should staff be allowed to work from home during emergency times? Should libraries invest in telework technology?
- **Universal Basic Income** - Will Universal Basic Income impact library staffing and operational budgets? Will people on UBI volunteer to staff libraries? Will these reduced staffing costs free up the budget for more programs, or will library funding be cut as libraries no longer needs as much hired staff?
- **Staff training** - Should library education span beyond information management into “nontraditional” librarian roles like community engagement, marketing, and social work and justice? Or should library education stay grounded in the basics of library management?
- **Racial equity** - Will libraries be able to dismantle white supremacy culture in hiring practices and in management/supervisory practices, or is discrimination in the profession too systematically ingrained to overcome?

Community

- **Political entities** - With the growing political divide, should libraries “de-politicize,” or should they further politicize in support of communities they serve?
- **Human services** - Should libraries be an extension of health and human services to their communities, or will the cost to budget and staff be too high?
- **Prioritized voices** - Should libraries offer a minority population services that upset the values of the majority (or a vocal minority), or should they follow the majority’s input?
- **Mistrust in Government** - Could public mistrust of government spread to a mistrust of libraries as a government-funded institution, or will libraries remain a trusted public institution?
- **Racial equity** - Will libraries be able to dismantle white supremacy barriers in programming, policies, procedures and services or is discrimination too systematically ingrained to overcome?

Funding

- **Balance wealthy patrons vs. serving underserved** - Should libraries invest in materials and formats that their more affluent patrons expect, or should they shift funding to better serve underprivileged populations in different ways?
- **Defunding** - Could community value shifts radically defund libraries?

Collections & Programs

- **Community curating content** - Should the public have a vote in what materials and programs are too controversial for libraries to offer, or should collection and program curation be solely at the discretion of library staff?
- **Spread and regulation of misinformation** - Should government authorities have the power to police sources of harmful misinformation? If not them, then who?
- **Alternative sources of information** - Could the public rely more on social media and uninformed influencers for information (or misinformation) rather than scientific and trusted sources?
- **Physical space** - Could entire libraries be digitized thus removing the need for physical buildings, or does the physical building serve as more to the community?

PLANS

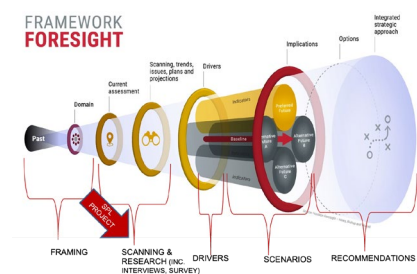
At all levels of stakeholders, there are a series of plans and initiatives under way that provide potential models for driving the future of libraries from a number of differing perspectives. Plans show how future investments may be directed and point to collective aspirations. They are not always publicly available, but when they are, they provide useful clues to the future.

Seattle's 2022 Green New Deal Opportunity Fund

The City of Seattle's Green New Deal invested \$6,491,539 in 2022 toward reducing greenhouse gas emissions, supporting community resilience to climate change, and increasing net zero affordable housing. This funding will affect both the NE and SW library branches, providing heating, cooling, and clean air as well affecting the number of unhoused patrons using the library for day shelter. ([link](#))

Public Library Association (PLA) 2022-2026 Strategy Plan

This is a refresh of strategic goals, positioning Equity, Diversity, Inclusion and Social Justice (EDISJ) as central to the work of libraries within communities. ([link](#))



Seattle Race and Social Justice Initiative 2022-2026

The RSJI is a citywide program that helps bring more diversity and equitable practices to government and organizations. It focuses on improving workplace culture, improving communication, and improving outcomes with and for the many diverse cultures of the Seattle community. ([link](#))

National Collection of U.S. Government Public Information: Strategic Plan for FY 2023 - FY 2027

The focus of this strategic plan is building and curating the National Collection thereby ensuring the public's right to free, equitable and convenient access to past and present public government information resources. ([link](#))

Washington State Basic Income Feasibility Study: A DSHS Report to the Legislature ESSB 5092 Sec. 205(11) June 1, 2022

This plan by the Washington State Department of Social and Health Services outlines the feasibility of creating a state basic income and how to roll it out in the state of Washington over 24 months. It also includes a list of other communities in the US that have basic income pilots, including the "King County Guaranteed Basic Income Pilot" where Seattle is located. It is heavily researched with good citations. ([link](#))

Washington State Adult Education 4-Year Plan 2020-2023

This four-year plan (currently half way through) outlines the shape of the future of adult basic education in Washington and ensures that adult basic education and English language education open up new career pathways and equitable educational opportunities for adults to develop the skills and earn the diplomas, certificates and degrees necessary to reach their educational and career goals. ([link](#)) ([link](#))

Executive Constantine announces proposed investments to support a robust public safety plan for King County 2022

King County Executive Dow Constantine announced a set of proposed investments in his biennial budget across multiple departments aimed at reducing crime, gun violence and behavioral health crises. The plan's four themes include ([link](#)):

- Deploying a highly trained and coordinated safety network
- Ensuring safe and appropriate places for people in crisis
- Being data-informed and responsive to community needs
- Providing accountability and victim support

One Seattle Plan 2022

While still in development, this "plan for a plan" highlights several areas of interest including looking closer at the equity of past plans and the statement, "The City is committed to repairing past harms and working toward an equitable future for all. To that end, we will center the voices of Black, Indigenous, People of Color and others who are often marginalized in planning processes." It builds on the current 2035 plan, *Seattle 2035 Comprehensive Plan*. ([link](#)) ([link](#))

Microsoft plans multibillion-dollar expansion, renovation of Redmond campus 2017

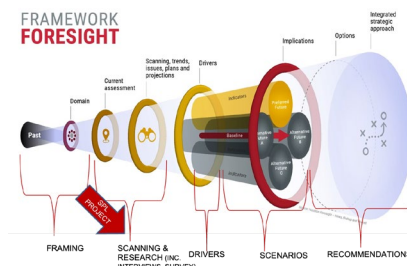
While announced in 2017, this expansion is still under development and the plan is not yet complete. It is “aimed at attracting and retaining workers by creating a more modern city vibe at its suburban Redmond headquarters.” [\(link\)](#) [\(link\)](#)

Affordable Housing on Religious Organization Property

“To address displacement and support community resilience, we developed land use policies to support faith communities seeking to create affordable housing. This new tool gives religious organizations more flexibility to redevelop their land with long-term, income-restricted affordable housing.” [\(link\)](#)

PROJECTIONS

Projections are publicly available forecasts relating to the domain or key aspects of it. These third-party forecasts help provide a “reality check” on both the stakeholders’ plans and the research teams’ thinking about the domain. Here are some of the projections our teams found during their research.



Librarian futures: Charting librarian-patron behaviors and relationships in the networked digital age 2021

Explores the future role of librarians in relation to the library patron in a digital context; this report is a result of the most extensive librarian and patron survey on patron workflows ever conducted, with over 4,000 surveyed and a range of library stakeholders interviewed.

Key Insight: With the growth of open access and the patron shift away from the library as a starting point, “the collection” will diminish in centrality and importance, driving librarians to be central to knowledge-creating in different ways: as experts in utilizing digital tools to support patrons in navigating resources and as facilitators of user-experience and patron workflow. [\(link\)](#)


Digital rights management (DRM) and books 2021

Highlights new and future ways to approach DRM and how to better overcome piracy and illegal online activities. Namely, it points to libraries as uniquely positioned to tackle digital piracy by competing with pirate sites through its advantages of free access, online safety, no distracting ads while reading, no vulnerability to viruses, and a higher quality of digital files.

Key Insight: Free information removes the monetary incentive for creating content, relying entirely on enhanced reputation for the creator’s reward. Authors and publishers will need assurance moving forward that they will be able to receive just compensation. [\(link\)](#)

A New Model for the Public Library 2019

Explores the macro- and micro-level trends impacting public libraries and developed design strategies to support its evolving community role. Namely, designing for belonging and safety, for the integration of physical



and virtual, for flexible growth in roles/spaces, and for media production and maker culture alongside 3D printers, CNC routers, and laser cutters.

Key Insight: According to a recent survey conducted by the Pew Research Center, millennials are visiting libraries more than any other generation, and two-thirds (65%) of respondents 16 and older said that closing their local public library would have a significant impact on their local community. ([link](#))

Artificial Intelligence and machine learning in libraries 2019

Argues the near future of library work will be enormously impacted and perhaps forever changed as a result of artificial intelligence (AI) and machine learning systems becoming commonplace.

Key Insight: AI and machine learning systems have the potential to change basic functions from cataloging to search to interfaces with patrons, so it will be important for libraries to understand, experiment and build some of their own tools in this space to preserve library dollars going to vendor/third-party solutions. But AI is not a holistic solution; its outputs can be culturally normative rather than visionary, it produces results that may not be grounded in meaning or relative context. Artificial intelligence does not remove the need for human intelligence. ([link](#))

Public libraries as anchor institutions in smart communities: Current practices and future development 2019


Analyzes innovative practices of libraries to show the potential of libraries playing an important role in the development of smart and connected communities due to their strong legitimacy in the eyes of citizens.

Key Insight: Libraries are consciously working to become a third space; a place for learning in multiple domains that provides material resources and active learning opportunities. Evolving the third space will help foster smart communities via expanding and improving upon literacy (including technological, financial, and social literacy) and workforce development with diverse community members which in turn, would help local economic growth. ([link](#))

Index-based discovery services: current market positions and trends 2018

An updated look at discovery products – a genre of products established in 2009 – that focuses on how these products have been implemented in academic libraries, primarily on index-based discovery services, and finds that despite broad interest, the number of category players is still limited and constant.

Key Insight: Continued movement of academic libraries away from integrated library systems and increased adoption of library services platforms will come with an increased pairing of components from the same vendor, but it is unlikely that an open access discovery index will be created with the same scope as current commercial offerings within the next 5 years. Current products/vendor predictions include: FOLIO to be paired with EBSCO, OCLC to consolidate WorldCat, Ex Libris to



consolidate Summon and Primo, & discovery services like Yewno to replace/supplement traditional indexing. ([link](#))

Library spaces and smart buildings: technology, metrics, and iterative design 2018

Discusses tech/tools being used for analyzing library spaces to improve the environment, including research on: how furniture movement acts as a stand-in for patron activity; how experimenting with “makerspace” tools such as the Raspberry Pi and Arduino offers noise management in the future; and how computer vision can see how patrons move around in library spaces and derive “attention” measures from those movements while still protecting patron privacy.

Key Insight: Libraries will need to use machine learning systems to sort through data and answer many more questions about the future of library space, allowing better design, more effective, and more useful spaces for our patrons. But the combination of data being toxic to the privacy of our patrons and the risks of perverse incentives affecting decisions (where an organization rewards the achievement of an assessment, only to realize that the achievement undermines the original goal, e.g. The Cobra Effect) is enough to caution libraries that wish to implement a data-heavy decision-making or planning process. ([link](#))

The Future of the Academic Library Print Collection: A Space for Engagement (Arizona State Libraries) 2017

Academic libraries seek to engage people with information resources and maximize use of library spaces. When users increasingly rely on digital rather than print resources, libraries respond by shifting space usage from stacks to user working and reading spaces. How then do we, as academic library professionals, best keep print collections on public view and maximize user engagement?

Key Insight: The authors advocate moving toward a more flexible, user-focused service that makes library collections easier to understand and to use. They foster increased engagement with print resources among library users, particularly with open stack print collections and users within the local community. ([link](#))

Forecasting the future of library and information science and its sub-fields 2020

This study sought to draw a picture for the future of the LIS field and its sub-fields by analyzing 97 years of publication and citation patterns.

Key Insight: The results of the study show that the LIS sub-fields are completely different from each other in terms of their publication and citation patterns, and all the sub-fields have different dynamics. Furthermore, the number of publications, references and citations will increase significantly in the future. It is expected that more scholars will work together. However, the findings prove that publish or perish culture will shape the field. Therefore, it is important to go beyond numbers. It can only be achieved by understanding publication and citation patterns of the field and developing research policies accordingly. ([link](#))

Public Libraries' Perceptions of Future Collaborations for the Development of Smart Cities and Communities: Understanding Influential Factors 2022

Recently, the concept of smart city has been adopted by many communities as a strategy to find alternative solutions to increasingly complex social, economic, and environmental issues. Different local actors, including public libraries, are already playing an important role in developing smart cities and communities either by themselves or in collaboration with other organizations. However, most public libraries are not currently collaborating for smart community development. Therefore, this paper analyzes the factors that influence public libraries' perceptions about future collaborations in developing smart cities and communities as well as their potential benefits.

Key Insight: The results show that consequential incentives, the nature of the task, preexisting relationships, an agreement on initial aims, and a collaborative and supportive leader all have a significant positive impact on the extent, effectiveness, and benefits of public libraries' future collaborations to develop smart cities and communities. ([link](#))

New Model Library: Pandemic Effects and Library Directions 2021

This briefing addresses a set of fundamental questions to envision libraries in a post-pandemic era, regardless of size, culture, or community served. These are questions addressed through the experiences and observations of a group of library leaders from academic and public libraries in four regions: North America, Europe, Asia-Pacific, and the Middle East.

Key Insight: Leaders made short-term changes during the pandemic that they expect will intensify long-term shifts in library collections, including ([link](#)):

- Offering convenient options for mediated and contactless interaction with digital and physical collections
- Prioritizing discovery and access of open content
- Negotiating with e-book and content providers for more affordable licensing terms that better account for library use
- Increased desire for and use of digital content that publishers made available to libraries at a lower cost due to the pandemic (and how to pay for it when prices go back up)
- Investing additional resources for loanable technology to support internet access and online activities

Metaverse Libraries: Communities as Resources 2017

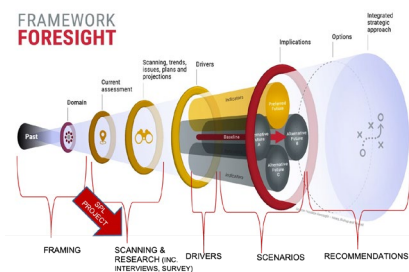
This is an examination of the purpose and potential of virtual world libraries

Key Insight: The Community Virtual Library has been an anchor for this concept for some time, and is expanding into other existing worlds, such as Inworlds and Kately to provide greater access to high-quality educational resources. ([link](#))

INTERVIEWS & SURVEY

The interviews and survey are designed to complement the scanning and research. The fifty interviews and nearly 100 survey responses were drawn from a mix of SPL members and selected community members. In our interviews, internally we talked with presidents, board members, heads of divisions, executive directors, deputies, and deans. And externally, examples of the types of groups we interviewed were: gender justice advocates, law professors, groups representing seniors, and tribes, community support groups and foster care. The survey was sent to the broader community and was translated to over 15 languages. They responded to a series of open-ended questions designed to encourage strategic thinking. There are no "correct" answers; instead, the responses reveal the hopes and concerns of respondents that provide valuable input for framing the topics that are central to the scenario workshops.

The results are sorted by overarching themes and then supported with anonymized interview /survey responses.



Interview & Survey Questions

1. If I could answer any question for you, what would it be?
2. What will you and your family need in the future from the Library?
3. If you looked back from the future, what would be the Library's greatest accomplishment?
4. If you looked back from the future, what would the Library's biggest failure likely to be?
5. What does the Library need to forget and remember?
6. What are one or two critical strategic decisions that will significantly impact the future of the Library?
7. What are the top 2 or 3 trends driving the future of the Library?
8. What should I have asked that I didn't? (interview only question)

Interviews

Staffing

“Staffing will always be a problem.”

Volunteers are imperative

Do we need Masters’ degrees?

Current and growing challenge

Librarians are being called on to perform roles that historically library school does not prepare you for

Relevancy

How can libraries play a critical role in improving literacy, which is as the foundation of a health community and democracy?

Can the public library system evolve to remain relevant to the communities they are in and serve?

Are libraries still valued by the community?

Prioritizing

Stop being everything to everyone

Need to prioritize hiring staff with understanding of tribal sovereignty

Lots of staff time is invested in one staff program rather than investing in/prioritizing funding efforts where they’re needed

Funding

Future success or failure depends on funding

Does SPL have the budget needed to continue all its programming

The library needs a long-term funding strategy that funds the library system in a sustainable way

Funding model is the big strategic decision

Library staff are like social workers

What sort of support do they have for staff to look after their wellbeing?

What is the proper role of libraries? They have long been a vibrant community hub. They are now increasingly providing services, but is that really something we want to do?

Us vs them mentality between leadership and frontline

What distinguishes the library from all the official social service offices and need boundaries to maintain their role to society

Community hub

When the library thrives, the community thrives

How do we keep it safe for everyone?

Critical to keep SPL staff that have a knowledge of tribal nations

Failure would be to Focus on affluent communities as opposed to those who get the biggest need

We are lucky to have an innovative, committed library in Seattle.

Keeping up with tech

Will space remain important? Community spaces versus media becoming more online/nonphysical

TRUST. The people don't trust AI, they trust librarians.

Too much tech relied upon heavily that is fragile and no longer supported by original vendors

The continuing advance of technology, which puts pressure on libraries to be nimble and adapted

Will community support continue?

How will the libraries make information relevant to trans community accessible?

What is the tribal engagement plan or relationship building plan between The Seattle Public Library and the tribal community?

Do we focus on going to patrons or on having them come to us?

Physical space and books

Will actual physical books continue?

I think the Library needs to decide what it wants to use its spaces for

Do we even need physical space?

How relevant are the physical spaces versus programmatic activities in the future of public libraries?

Role in climate change

How will the weather and human impact on the environment affect operations?

How to buy into climate change. Role as shelter, staying open, should they be climate neutral or have solar panels on the roof; move to more eBooks; reduce physical footprint; be a leader?

This past year SPL has dealt with heat closures, smoke closures, and more inclement weather is coming soon

Censorship

Censorship is an issue

Growing access to e-books threatened by publishers

Industry seeing more challenges to books, programs, folks who want to shut things down. Collections could be a growing challenge

Surviving culture wars

If the library commits to making statements around social justice issues, what will that mean for funding in the larger context of things?

In terms of the culture wars, how to maintain serving all people's needs/rights/opportunities for freedom of expression

Is "library of things" really for us?

Would love to see a library of things that gives people access to safety, happiness and well-being...

It's time to shift the idea of the library resources

Survey Themes

Want more from this Third space

Increase open hours

Expand role as third space

Community hub for events and classes

Entry point for social services referrals

A place to receive help with family/local historical research

Repository for all kinds of physical items and media (traditional media as well as a "library of things")

Center for creativity with makerspaces and private tech rooms

Space with access to copying/printing/scanning

Comfortable place to hang out, pass time and grab coffee/snacks

Ideally, the Library could be within walking distance of all Seattleites.

Staffing needs

Library staff really do make a difference in the world!

Lack of management oversight; loss of Librarian positions

Staff with specific language & cultural competency skills relevant to their neighborhoods

Hiring people with lived experience over educational "merit"

Breaking down silos within staffing

Distributing administrative power to people on the ground

Hiring a more diverse work force (including librarians of color)

More staff to provide support for patrons. Patrons still need in the moment computer help and other resources.

More BIPOC employee's period

Welcoming to community

Continuing to welcome all, while maintaining security and safety

There's a definite breakdown of civility at the moment, we need to be resolute in keeping a safe and welcoming environment for all.

Maintaining a strong physical presence, keeping buildings open and full of books and friendly

Find a way to be a positive and welcoming space for all—houseless and non-houseless

Engaging more in community co-curation and collaboration work

Celebrating and centering marginalized communities and diverse collections.

Social work

To what extent should we devote our limited resources to filling gaps in a chronically unfunded social safety net.

It would be a failure to add social work to the goals of the Library. The Library cannot do it all.

Supplanting staff with social workers and psychologists to deal with a high wave of people with all plethora of needs above and beyond Library staff skills. That need is only going to increase.

Making a bold, unequivocal commitment to social justice, diversity, equity, inclusion and accessibility.

The libraries should have more social services on site.

Technology needs. Physical vs digital

Maintaining relevance in an information-fluid future

Better public computer equipment

Equipment to facilitate teleconferencing

Building and maintaining options for patrons to engage in library resources virtually via more robust technologies

A failure to not engage in innovative technologies (virtual, "meta-verse" interactive platforms, etc.)

Some of our biggest unmet needs that directly impact our prioritized audiences are in-person tech help/tech classes, in-person English Language Learning classes, and in-person citizenship classes

Keeping access to information free, providing free access to technology (computers/tablets/internet/3D printers/laser cutters)

More proactive

How will the Library adjust to meet the increasingly severe impacts of climate change?

We need to be able to move quickly when the community demands it

Be an exciting resource to our communities

Partnerships

Create a space of wrap-around services by developing deep working partnerships with relevant agencies

Working (with partners) to develop equitable programs and services that happen in the community (sometimes in the buildings, and sometimes not in the buildings)

Staff need to be able to commit to community partners and stakeholders, something many feel we currently cannot do

The current staffing model does not allow staff time to connect with, plan with, complete projects with and support community partners in a meaningful and sustainable way

Additional security officers

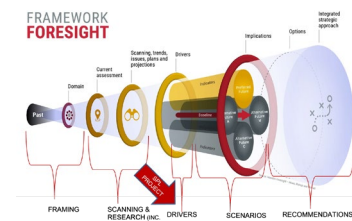
More compassionately trained security

Hire more security so that security can be easily dispatched and arrive at branches faster when back up is needed


Adding more security officers and social workers could change everything

Drivers

The learnings from the scanning, current assessment, trends, issues, plans, projections, and interviews/survey were synthesized into a set of drivers: the key building blocks of the scenarios. Drivers are the key themes of change that are shaping the future of libraries. The drivers may come from a combination of scanning hits, trends, or any other insights derived from the research. The drivers encompass cross-cutting changes that should be central considerations in developing the scenarios and subsequent strategy. The scenarios explore how the drivers could plausibly interact to create different alternative futures. Each driver is defined below.

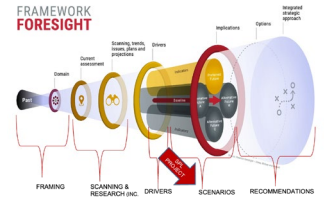


- **Security Concerns** - Patrons expect libraries to provide security for various physical and cyber security threats, especially protection of patron records and Library materials and resources.
- **Money Troubles** - Doing more with less continues as demands on the Library increase while financial support is unreliable.
- **Controlling the Info** - The continued road to intellectual freedom is shaky. Prohibitive access, rising prices, and political squabbles are growing.
- **Staffing Issues** - Competition for talent and struggles with retention continue as education level and capabilities are reconsidered. A stellar workforce is key for a preferred future
- **Social Services & Opportunity Gap** - Libraries are community hubs to provide services for social welfare and other programs, yet communities are unwilling or unable to adequately fund these services leaving libraries filling the gap.
- **Automation & Digitization** - From funding, staffing, and collections to community services, tech enables libraries to reach more patrons with augmented and wider ranging services (sometimes at lower costs).
- **Reaching the People** - Organizations are finding new ways to reach stakeholders/members (e.g. social media, dropping fines, partnerships, automation).
- **Community Anchor and Incubator** - The Library is an extension of the culture of the community they serve.
- **Culture Wars** - Political and cultural battles are being waged against libraries. Library services are the epicenter. A position must be taken, and it can't be of "neutrality."
- **Shades of Green** - How green do libraries want to go? From refurbishing buildings, training staff on low carbon footprint, and reducing carbon emissions by increasing remote working and programming, libraries have a myriad of green options to choose from.

- 
- **Changing Governance Models** - Demand grows for more effective organizational governance. Governance, assets, and identity are increasingly decentralized in favor of more specialized and localized service delivery.
 - **The Next Tech Wave** - A new wave of tools is emerging to deal with the exploding availability of (mostly digital) information (e.g., AI-based avatars).
 - **Library of Things** - There may be opportunity to expand the range of products and services that libraries could share (e.g. from laptops to weed wackers).
 - **Local News and Archives** - The decline of local news outlets creates a gap in local information that could be filled by libraries.

SCENARIOS: LIBRARIES 2032

Scenarios are plausible yet provocative forecasts of a particular domain. The goal is not necessarily to get the future right, but to explore these plausible futures and come up with a plan to stay resilient and/or take advantage of changes in the future. If this is done well, the hope is you are not surprised by any future. They are examples of what the future might look like and the types of things we may experience. The scenarios are intended to create a picture in the readers' mind that helps them be aware of and stay resilient to the future.



System archetypes are typical patterns of change first identified by Professor Jim Dator of the Hawaii Futures Studies program. The Houston Foresight program made some modifications captured as the Houston Archetype Technique (HAT). The patterns are described below. We always start in the Baseline and then move to either Collapse or New Equilibrium. From New Equilibrium, we move to version one of Transformation. From Collapse we move to version two of Transformation.

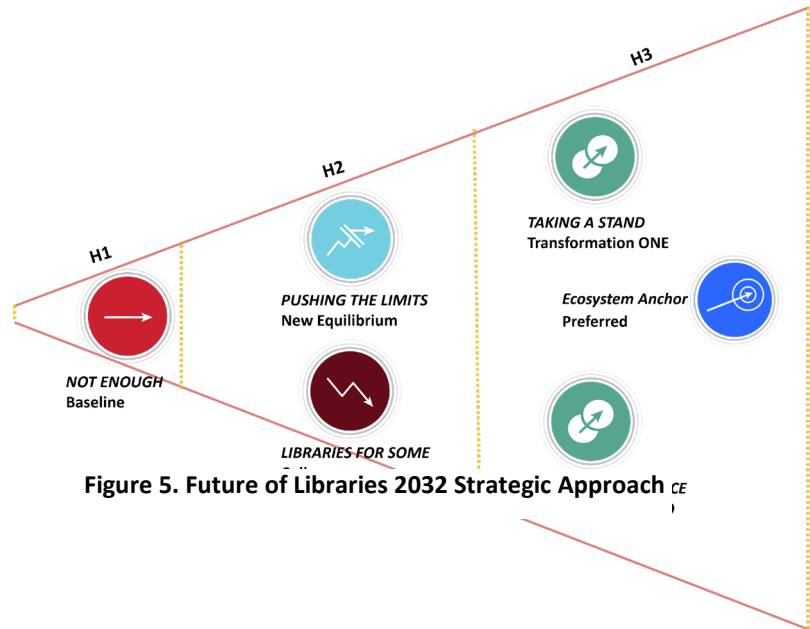


Figure 5. Future of Libraries 2032 Strategic Approach

- Baseline** – The Baseline scenario is an extrapolation of the present into the future, meaning present trends continue within the system without any major disturbances or surprises. In a Baseline future, the current system continues to grow in the sense that its present trends continue. This is the most unlikely future scenario, as disturbances and surprises are to be expected.
- Collapse** – The Collapse scenario shows a system stuck in dysfunction. A key point is that collapse does not necessarily suggest the apocalypse, but does suggest the system regresses or dips into a level of dysfunction (e.g., economic stagnation or recession as the norm). Of course, this scenario could also show an outright collapse as well.
- New Equilibrium** – The New Equilibrium scenario presents a challenge to the system that leads it to compromise in order to save the existing way of doing things. The key notion here is one of challenge and response. The system is challenged and responds in a way to save itself. It's based on the notion that systems are stable and will tend to — and want to — return to baseline after being disturbed. They will actively seek this return to stability and be willing to make some compromises in order to preserve the essence of the system (e.g., bailing out the banks at the onset of the Great Recession).

- **Transformation** – In the Transformation scenario, we can't save the system, so we rewrite the rules of the game. Transformation entails fundamental change to the system. This transformation could be driven by any number of factors, values, technologies or economics. The key point is that it essentially involves creating new operating rules or guidelines.
- **Preferred** – In a Preferred scenario, the system moves in a visionary and/or preferred direction. This scenario is not one of the traditional archetypes, but it works the same way in that driver outcomes are projected within the guidelines of the best plausible result. The Preferred scenario is formed based on the preferred or visionary direction of the client.

Here is a simple way to think about the rules of each archetype:

- Baseline (same rules)
- Collapse (no rules)
- New Equilibrium (changing rules)
- Transformation (new rules)
- Preferred (preferred rules)

The steps followed to develop the scenarios using the HAT for this project included:

1. Identify, describe and prioritize drivers.
2. Project how each driver plays out in the future according to each of the archetypes.
3. Create first draft scenarios.
4. Conduct a group evaluation and discussion to review scenarios and adjust to make the set comprehensive and distinct.

The following pages contain an expanded treatment of each scenario, which includes:

- Summary – An at-a-glance view that frames the scenario.
- Driver outcomes – Explain how drivers play out in each scenario.
- Scenario description – An expanded treatment of the storyline.

	<p>Not Enough </p> <p>Despite good intentions, increased expenses mean the library can't keep up with demands, which disappoint the community and the library.</p>
	<p>Libraries for Some </p> <p>Library services move into the cloud with remaining branches more like shelters than traditional libraries.</p>
	<p>Pushing the Limits </p> <p>The library dramatically expands its scope of services, and then scales back.</p>
	<p>Taking a Stand </p> <p>Libraries take a strong stand for community values and intellectual freedom that earns it a key role in bringing the community together.</p>
	<p>Trusted Third Space </p> <p>Building trust with community through seamless invisible tech, relationship building and equitable resources allocation.</p>
	<p>Ecosystem Anchor </p> <p>The library is able to return to its roots as the guides to the world of information as social services and other direct provider services are distributed to other organizations in the community ecosystem that are more qualified to handle them.</p>

Figure 6. Scenario descriptions

NOT ENOUGH

Baseline: Same rules



Despite good intentions, increased expenses mean the Library can't keep up with demands, which disappoints the community and the Library.

The Library continues to trudge forward incrementally, but increasingly finds itself stressed and stretched thin. Budgets stayed flat, while demands on the system grew significantly in three key areas.

First, very successful community outreach programs uncovered demand for more and more programs and services, but without an accompanying increase in funding. This no-win choice was to keep adding new offerings and put more strain on staff, or prioritize and cut, which inevitably created a strong backlash.

Second, security concerns ate up a larger share of budgets. These concerns came a variety of sources. The number of incidents, involving violence, drug use and mental health crises in or around Library grounds continued to increase, creating safety issues and concerns. Growing controversies, protests and incidents resulting from culture wars also increased the need for security. In addition to these physical safety concerns, cybersecurity costs soared due to theft, crime and even sabotage.

Finally, the Library was encouraged by funders to use automation as a way to improve efficiencies and cut costs. While this helped to a degree, in many cases the costs of upgrading outdated systems wiped out any potential savings.

Key changes	Key challenges
<ul style="list-style-type: none">• Community outreach leads to increased interest in more Library programs• Security issues require more spending• Automation helps, but is also costly	<ul style="list-style-type: none">• These increased expenses exceed flat budgets, putting strain on staff and leading to cuts.• Prioritization is needed; backlash against cuts is strong.

Overall, this is a future of muddling through – neither very bad nor very good. Perhaps the toughest part was the great potential to do more being lost in this “not enough” future.


Not Enough Driver Outcomes

Security Concerns	There is an increased public demand for additional security measures in response to disruptive and aggressive security incidents that are impacting Library staff and patrons, as well as destruction and theft of books and property, cyber assaults and data breaches.
Money Troubles	Funding continues to be unstable while operational, technology and personnel costs surge due to shifting public priorities and demands. Private donors are a strategic priority, but managing their interests, among many other community interests, is sometimes a challenge.
Controlling the Info & Culture Wars	Libraries are at the center of identity and culture wars. Increasing frustration has fueled more conflict and attacks.
Staffing Issues	Continued burnout and fears for personal safety have driven attrition without a strong pipeline of new staff entering the field. Libraries are forced to reconsider formal educational requirements and increase reliance on training volunteers.
Social Services & Opportunity Gap	Public libraries continue to be a refuge for unhoused individuals and families and other individuals seeking social service supports, which requires increasing staffing, training, funding and regulatory support.
Automation & Digitization	Libraries digitize and automate information services, access, collection management, and back-office administrative processes in an attempt to improve efficiency and cut costs, with mixed results.

Not Enough Scenario Description

Library staff is eager to do more with the community, but continually finds itself short of staff, technology and money. It creates a see-saw between trying to do more with less – and burning out staff – or making cuts and facing the resulting backlash.

Increased attention to community needs proved to be a double-edged sword in that it stimulates increased interest in the Library doing and providing more. This leads to some communities feeling that “the Library is not reaching us!!” if prioritizing funding results in cuts to their programs. How and what to prioritize is further complicated by the need to maintain political support, often putting the Library in the position of creating new



friends or foes with each cycle. Indeed, some Library offerings lack the elasticity to be modified with changing societal values and movements.

Culture wars and conflict continue across the United States with increasing intensity, frustrating both traditionalists and progressives as they struggle for control over the definition of America and its values. Activists on both sides have sought direct and indirect means to influence what libraries are, who they serve, what is funded, what is accessible and to whom. The Library tries to maintain a position of neutrality, despite threats, yet frustration at the Library from both sides for not taking a stand has reached a boiling point. For libraries, this has created a cycle of funding and defunding as political leaders change. This makes it difficult for libraries to secure longer cost saving contracts with vendors (e.g., technology, security, training, publishers) at better rates, since libraries are uncertain what the budget will look like year to year.

As a result of increasingly disruptive incidents in libraries, internal layouts have been altered to improve security. In a few branches, bookshelves were put out of public reach and patrons were asked to browse the collection through their phones or Library-provided devices, or to consult with human or digital staff. The remaining shared public spaces in libraries continue to provide the community with a 3rd space for connection, co-creation and collaboration, while also being a safe place for seeking shelter to find respite from extreme weather and unsafe environmental conditions.

Efforts to upgrade technology infrastructure were helpful (for instance, in tracking the effectiveness of outreach activities), but the costs of replacing outdated technology were a big expense. And more IT professionals needed to be hired, forcing staff cuts in other areas.

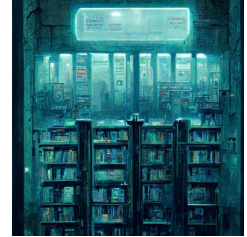
In this context, the libraries struggle with finding and retaining good staff. The increased integration of social services into the mission are welcomed by some staff, but not all. Many have left due to retirement, burn out or fear for their own safety, causing a reduction in operational hours in some neighborhoods. In some cases, Library staff are positioned behind safety screens. Remote “Zoom-brarians” and AI avatars are now employed, but community feedback consistently complains about the lack of personal touch. Passion is waning.

LIBRARIES FOR SOME

Collapse: No rules



Library services move into the cloud with remaining branches more like shelters than traditional libraries.



Technology adoption in the country and in the community accelerates, pulling more library services and collections into the cloud. Money troubles affect all city services, including libraries. Everyone is asked to make cuts. Consolidation results in branches being closed and budgets shifting to virtual services. Tech eats up most of the budget. Library buildings seem more useful as shelters, since there hasn't been any money to update physical collections or in-person programs and services.

Staff cuts are deep. The tech part of the workforce does better but even they are increasingly supplanted by AI and automation. At the branches, AI bots answer phones and provide basic services, but this frustrates patrons who are used to a more personal touch. The only staffing area that sees increases in personnel is security. Threats and incidents come from both sides of the culture wars. Some people are upset about controversial books and programs; others feel the Library isn't being progressive enough.

A vicious cycle begins in which, as services and programs are cut, fewer people use the Library, which leads to further funding cuts, and the cycle renews. It comes as a shock that such a well-functioning system could find itself in a near-death spiral.

Key changes	Key challenges
<ul style="list-style-type: none"> • Money troubles have forced the Library to go virtual for most services • 90% virtual Library services; 10% shelter-like services • Culture wars rage • Staff cuts are deep and the only increase in staffing is security 	<ul style="list-style-type: none"> • Try to avoid this scenario! • Be thoughtful about what cuts to make if money troubles become alarming (i.e. keep the personal touch) • Funding and changing skill sets for staff

Libraries for Some Driver Outcomes

Security Concerns	The physical library shifts to become more like a shelter and the only part of the staffing that sees personnel increases is security. Threats and incidents come from both sides of the culture war
Money Troubles	Money troubles affect all city services, including libraries. Everyone is asked to make cuts.



Controlling the Info

It is still hard to agree on what facts and truth are. Individuals used to live in social media information bubbles; now they live in AI model bubbles where their conversational assistants can speak fluently based on localized datasets/models.

Staffing Issues

Staff cuts are deep. The only part of staffing that sees personnel increases is security. The tech part of the workforce does better, but even they are increasingly supplanted by AI and automation.

Automation & Digitization

As the Library goes mostly virtual, AI and automation replace much of the workforce

Reaching the People

Physical libraries turn into shelters for those in need in the community, but the broader community has limited use of these spaces.

Culture Wars

Culture wars rage on both sides. Neither is happy with the direction of the Library and find the resources provided by the Library to be controversial for various reasons

The Next Tech Wave

The Library explores the next tech wave...but without a clear strategy, new technologies are costly and not fully utilized.

Libraries for Some Scenario Description

The Library of 2032 is battered by citywide money troubles. The response over the years has been to close branches and move to virtual operations. The push to reduce the Library's technology budget follows the same money troubles affecting all city services.

The days of typing, swiping and scrolling for reference materials or answers has faded away. Patrons now receive short conversations with AI Assistants who answer questions with speed, but often lack understanding and specificity. A virtual suggestion box is filled with complaints about the lack of human touch (ironically, there is no human to answer them). The Library does its best to have the most useful online materials, and keeps training the bots as best they can, but it's no panacea. Reference librarian staff who have chosen not to retire are now 'prompt engineering' specialists who help patrons learn how to interact with AI Assistants.

Some patrons have embraced the shift away from traditional books, e-books and media that once filled their local branch, but these typically more affluent, educated and tech savvy patrons do not want to read an e-book written for the masses. Instead, they want to tell the AI-based e-book platform their favorite new plot and have a unique book written on demand. Library leaders say licensing fees for this personalized media now surpasses the traditional legacy model of big publishers.

Cloud service providers have moved away from the low-cost era of streaming information to the higher value streaming of intelligence. This new era of streaming AI conversations is more computationally expensive and requires higher levels of cybersecurity to protect privacy. To stay within budget, patrons are in some cases limited to 90-second conversations with Library AI Assistants.

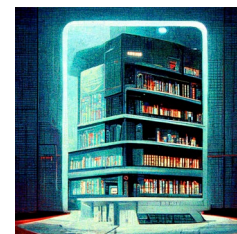
For local branches that remain open, buildings have been transformed to address funding gaps from declining government services. With many government buildings now shuttered, libraries are now more like de facto shelters with minimal services.

Library staff numbers have been dramatically cut. Professionally trained staff are few compared to operational staff who keep the building's mechanical systems running, despite a lack of money to make major repairs and investments. Staffing of social service areas varies each day as government affiliated teams rotate across branch libraries.

A vicious cycle begins in which, as services and programs are cut, fewer people are using the Library, funding is further cut, and the cycle renews. It comes as a shock that such a well-functioning system could find itself in a near-death spiral.

PUSHING THE LIMITS

New Equilibrium: Changing rules



The Library dramatically expands its scope of services, and then scales back.

Volatility is the norm. The community is no longer accepting things as they are and demand participatory approaches. With gaps in opportunity and social services, some in the Library push to “go for it” by jumping directly into providing direct social and community services. The city nudged libraries in this direction by providing funding, and a big push came from wealthy donors with a strong agenda to improve social services citywide. For instance, the decision to make the Central Library’s 5th floor a state-of-the-art hygiene shelter was funded privately and received national attention.

Those who felt themselves to be traditional library staff either choose to leave or are nudged out the door as more staff with a social services focus are brought in. For some, the last straw was the expansion into the providing a “Library of Things,” enabled by a public referendum and supported by yet another private donation. The Library of Things proved to be a very popular service for many in the community, but many others questioned why a library was lending power tools -- one branch even lent out plumbers.

The budget and staff are growing – albeit in a different direction than the past – which seems to validate the move. But below the surface, patrons are questioning what’s going on. Support for the Library weakens among its traditional core of users. A massive shock takes place when a new Library Levy barely passes after a recount. The Library feels they will not win another one and decides to pull back and re-shift its focus. The shift is not a total about-face, but rather a move from direct delivery of services back to a more traditional referral role. This took time (especially in re-acquiring collections) required lots of work with partners, and involved losing some money, but many staff and community members felt that the Library had regained its proper footing.

Key changes

- **Go all in on social services and the Library of Things**
- **Big influx of private funding**
- **Volatility is the norm**

Key challenges

- A caution scenario in looking at moving away from traditional services to social and LOT
- The transition back to traditional core may be difficult

Pushing the Limits Driver Outcomes

Security Concerns

The Library increases physical security for those in greater need. Unfortunately, the Library is now unable to meet the security needs of those patrons who, in the past, have not required social services.

Money Troubles

Funding for social services and the “Library of Things” comes largely from wealthy private donors

Staffing Issues

Library staff struggle to find a balance between the traditional referral-focused role and a social services role, as the latter grows in importance within the system

Reaching the People

The expansion of social service offerings and the move into the “Library of Things” brings new patrons into the Library community, but some traditional patrons feel overlooked

Social Services & Opportunity Gap

The Library has obtained foundational funding for social services and funding for core collection development, retention and maintenance is drying up.

Library of Things

The shift to focus on social services opened the doors for the “Library of Things,” from power tools to plumbers

Pushing the Limits Scenario Description


As a result of the pandemic period of the 2020s, downtown Seattle became less a downtown core and more of a neighborhood. Many people returned to work in their offices, but many did not. Those buildings left empty prompted decision makers to provide extensive housing for the homeless.

Even in the midst of this strain on finances, and with new foundational funds, the Library provided social services at the level it desired, something the City of Seattle helped fund. Collections mattered -- access to all sorts of media mattered -- but being a focal point of a community is what really mattered to The Seattle Public Library. The Library, as a community focal point, helped more people in need in the communities it served, which included the downtown urban core and those with access issues or disabilities from across the city. Many of these same foundations provided new funding to assist unhoused people and families. A new hygiene shelter was built on the 5th floor of the downtown Central Library. SPL considered building satellite centers at various branches if the downtown experiment was a success.

These services meant a different kind of librarian staff was needed at the Library: one who was as much a facilitator of social services as a facilitator of accessing information and collections.

Local corporations saw a potentially lucrative market by supporting the Library’s growing maker community. A close alliance between SPL and various tool libraries in the area were forged, and each library branch became a pickup/drop-off point for tools of all sorts. Technology firms provided funding for up-to-date consumer and maker tools, supplies, software and adjuncts in return for access to the tool libraries and to the creatives who might make a name for themselves (and join their companies as future skilled employees).

Problems began to appear in the year leading up to the next Library Levy vote. The City of Seattle approved a 10% cut in funding to the Library, citing their recent success with increased foundational grants.



Simultaneously, officials wanted to push some of the increased costs from expanded maker capabilities to SPL. It did not help that demand increased for creating makerspaces at neighborhood branches, which meant less space for meeting rooms. Inexpensive meeting space was at a premium within the City of Seattle, and libraries provided one of the few free or inexpensive options.

And then two events in rapid succession set off sparks. The first was a news leak that the Library decided to permanently remove the children's book series "Babar," "The Adventures of Tintin," and "Curious George." The second was an incident where a 16-year-old girl, serving her high school mandated community service at the downtown Central Library, had her left arm cut when she tried to prevent the partner of a Central Library hygiene center patron from entering the building through what was originally marked as an "emergency exit" by the Library.

The injury was thankfully superficial, but it made for graphic visuals on the news and social media when someone released a video of the young lady being treated at the scene.

Suddenly rumors of all sorts abounded, none of them good for the Library. Was the Library getting a kickback from King County, or perhaps corporations? Why was the Library intending to run a shelter for domestic violence survivors when they had enough on their hands providing temporary shelter and basic hygiene? Why were they putting children in delicate situations? Various factions and representatives wanted explanations. The Library was under siege and no answer seemed to be satisfactory to enough people, raising more concerns.

Although the vote was in November, the levy only officially passed after a recount in December. SPL eased away from providing space for the maker community, returning to offering media and materials for makers instead.

As a result, the Library sought greater participation from neighborhoods regarding any change in use of their branches and made a promise to pull back on social services and return to its traditional roots. This took time, especially in re-acquiring collections, required lots of work with partners, and involved losing some money, but many felt the Library had regained its proper footing.

TAKING A STAND

Transformation 1: New rules



Libraries take a strong stand for community values and intellectual freedom that earns it a key role in bringing the community together.

After several years of societal wars raging high, and the Library trying to do its best to remain “neutral” and “unbiased,” the Library finally says “we don’t have to be representative of every world view – we feel strongly about the values of our community, and we intend to double down on reflecting those.” Each library branch (under some guidance from Library administration) announces their “Our Values: Implementation Plan,” and drastic operations and accessibility changes are made. For the community, libraries just got a lot more accessible and relatable.

For Library patrons, these changes could not be more welcome! Libraries are trusted spaces where patrons know they can get services and access the collections they need. There is a big move into hosting convening community groups. Libraries are seen as safe and friendly places to gather. Libraries are also carbon neutral and climate resistant, serving as a model for the rest of the city. Now well known as a tech lender, the Library has served as a place to gain digital literacy and access to technology, especially for immigrants and older adults.

But there are also community members who don’t agree with these values and become angry, outspoken, and in some cases, outright hostile.

In response to this, in 2031, a prominent right-wing leader announces: “For years our values have been ignored or ostracized by public libraries.

Today, we announce, GabParler – a series of knowledge centers across the U.S. that carry and support materials and voices that are aligned with conservative interests and values.” As a result, these new “knowledge centers” fragment into niche libraries, which seem to be grossly political, but they sure are gaining a lot of attention, use and funding.

Key changes

- **Double down on values - no more neutrality**
- **Competition from niche library offshoots**
- **Libraries’ green initiatives serve as models for the community**

Key challenges

- Deciding upon and implementing values
- Staying “on top” of what the community wants and providing that well
- Partner or compete with knowledge centers
- Making sure marginalized populations feel welcome
- Training will be important

Taking a Stand Driver Outcomes

Security Concerns	The local community, especially minorities and marginalized communities, feel safe and supported within their neighborhood branch library.
Money Troubles	Libraries have lost funding as their non-neutrality stance alienates some community members. Community funding support is divided between traditional libraries and “knowledge centers” (i.e., niche private libraries).
Controlling the Info	Libraries take a proactive role in monitoring and supporting intellectual freedom. Conversely, private “knowledge centers” cater biased information based on the political views of their patrons.
Staffing Issues	Staff support the Library’s mission of bringing communities together and upholding intellectual freedom. Hiring practices are scrutinized, and patriarchal and white supremacy hiring biases are slowly rooted out.
Community Anchor & Incubator	Libraries truly become a reflection of their community through their values in the services they offer.
Culture Wars	Neutrality is dead. Libraries clearly stand behind their communities and embrace intellectual freedom. They’ve earned the fierce support of their communities and the enmity of community members who do not align with the institution’s values.
Shades of Green	Libraries are the model for carbon neutral and climate resilient buildings. In times of extreme climate events and natural disasters, libraries become shelters for their communities.
The Next Tech Wave	Libraries have become the leading public tech lender. Courses and seminars provide access to tech and teach digital literacy to underserved patrons, especially immigrants and older adults.

Taking a Stand Scenario Description


In 2032, The Seattle Public Library is a key institution in the community, known for its strong commitment to values such as diversity, inclusion and intellectual freedom. For groups that have historically been marginalized, the Library delivers the inclusiveness and accessibility these groups desire. After several years of societal conflict, the Library has ditched neutrality and taken a hard stand on community values. The Library issues a statement: “We realize we do not have to be representative of every world view, but we do feel strongly about the values of our community, and we intend to double down on reflecting those.” Each neighborhood branch (under some guidance from Library administration) announces their own ‘Our Values: Implementation Plan’, and drastic operations and accessibility changes are made. The Library’s stance on community values, and their adherence to them, have earned it the fierce loyalty of many in the community, especially marginalized groups who feel safe and supported within its walls.

The Library’s focus on community values has made it a trusted space for patrons to access resources, technology and support. As a leading public technology lender, the Library has served as a place for immigrants and older adults to gain digital literacy and access technology. Group gatherings on a variety of topics increase dramatically in Library meetings spaces.

In times of crisis, the Library also serves as a safe haven for the community, providing shelter during extreme weather events and natural disasters. Its commitment to sustainability and carbon neutrality serves as a model for the community, and the Library is widely recognized as a leader in climate resilience.

However, the Library’s stance on intellectual freedom has also led to tension and backlash from some community members who disagree with, and are sometimes outright hostile toward, the Library’s views. In response to this, in 2031, a prominent right-wing leader announces: “For years, our values have been ignored or ostracized by public libraries. Today, we announce GabParler – a series of “knowledge centers” across the U.S. that carry and support conservative materials and voices.” As a result, GabParler Knowledge Centers fragment into niche libraries. These new private libraries seem to be grossly political and biased, but they gain a lot of attention, use, and ultimately end up diverting some private funding away from the Library. Knowledge Centers end up dividing the Library community and drawing some patrons away.

Despite these challenges, The Seattle Public Library remains dedicated to its mission of bringing the community together and protecting intellectual freedom. Hiring practices are scrutinized. Staff are carefully screened to ensure that hiring is fair and inclusive, and efforts are made to eliminate any hiring biases that are based on historic patriarchal or white supremacist root practices. While private knowledge centers offer biased information based on the political views of their patrons, the Library and its staff take pride in playing a proactive role in monitoring and supporting intellectual freedom for all, while lifting up and supporting more under-represented and marginalized voices.



Overall, The Seattle Public Library is an integral part of the community, respected for its commitment to diversity, inclusion and intellectual freedom. As a reflection of the community's values, the Library is a key venue for bringing people together, and it continues to meet the needs of the communities it serves. While it has lost some funding and support due to its non-neutral stance, the Library remains a beacon of hope and support for all who enter its doors.

TRUSTED THIRD SPACE

Transformation 2: New rules



Building trust with community through seamless invisible tech, relationship building and equitable resource allocation.

Thanks to achieving an aspirational financial plan, the Library has enough money! Ubiquitous technology, seamlessly blended into the background, augments staff and services, rather than replacing. Staff members and community use Library technology without the obtrusive presence of technology and “noise,” like someone using a standard watch. Gone are the security gates, replaced by trust. Technology tools and services are also available to patrons for free for all ages and abilities

Meeting the people where they are, Library services are not siloed but available to all as pilots, and programs are scalable across communities. This includes decentralization of operations, allowing branches and programs to provide what is needed yet share their assets, collections and successful programs with others.

When one enters into a library space, they feel safe and welcomed, being met with helpful staff who are representative of and in tune with the needs of the neighborhoods they serve (e.g., a representative percentage of staff live with disabilities and help inform Library accessibility). Referral desk staff are not replaced by AI avatars as some feared, but are able to leverage technology to seamlessly project a live interactive hologram of themselves to community members at any branch through ZoomBooths. This is overwhelmingly popular with members, such as hearing impaired patrons who can receive support in ASL at any branch from a live holo-person. This also allows some Library staff to work remotely under certain circumstances.

Branches become the ultimate community gathering spaces where the public and those who work in public services can come together to collaborate.

Trusted Third Space Driver Outcomes

Security Concerns

When one enters into a library space, they feel safe and welcomed, being met with helpful staff who are representative of and in tune with the needs of the neighborhoods they serve.

Key changes

- **“High touch” technology that’s seamless and appreciated by all parties**
- **Decentralized operations that can scale**
- **Ultimate community gathering spaces**


Key challenges

- Implementing high / seamless tech
- Could easily get trapped into doing “too much”
- Develop and monitor collaboration between community and public service
- Retain inclusiveness
- Assess organizational readiness

Money Troubles	Thanks to achieving an aspirational financial plan, the Library has enough money.
Staffing Issues	Technology does not replace staff, but allows staff to work more efficiently and to specialize more in their expert areas.
Automation & Digitization	The Library turns to technology to help augment its capabilities. AR holograms of staff allow the Library to deliver live, real time/real person services to all branches.
Community Anchor & Incubator	The Library focuses on community engagement, meeting the community where they are and for what they need. As differing community values clash, some conflict grows among the branches because of the services they provide.
Culture Wars	The Library becomes the space for the meeting of the hearts and minds of the community. Culture wars still wage, but the Library is able to be a place of respect and tolerance for all those willing to also be tolerant and respectful. The Library draws a clear line that it has zero tolerance for hate.
Shades of Green	Technology enables green climate-controlled spaces and fair and equitable access to information and services.
The Next Tech Wave	The continuing evolution of digital presences feels less and less virtual. AR hologram avatars, remote bots, and predictive services allow for an all-new level of service across the many communities and languages in the area. The Library's tech-assisted service programs are so successful that other library systems follow, with some systems even paying SPL for specialized remote services, which allows the Library to invest more in its technology-based service program.
Local News & Archives	Similar to the Library of Things, the Library works with local hyperlocal news outlets and historic societies by providing resources to help them succeed.

Trusted Third Space Scenario Description

The 2020s saw major advances in technology around AI, data science, green tech, and perhaps most relevant to libraries, virtual and augmented worlds. The Library's Tech Advisory Board (TAB) has been instrumental in raising additional funds to re-invent the library experience for patrons and staff. Many feared that technology would replace people and that services would decline. The TAB faced this challenge and helped introduce a technology plan to augment and support (not replace) staff and services. The plan was so successful that the Library was able to hire new staff to design and build new technology applications. This new program has delivered at least two new advancements each year since forming in 2028. The tech implementations are important, but nearly invisible. Staff and patrons use technology without the obtrusive presence of technology



and “noise,” like someone using a standard watch. Some of the most successful and loved program applications include:

SafeSpace: Driven by advanced AI and smart building sensors installed in 2028, SafeSpace is more than just technology. At its core, it allows Library staff, security, social workers, and other professionals to become part of the SafeSpace network and provide an environment where visitors no longer question the safety of visiting public library spaces. While other libraries in the nation now look more like barricades to keep problems out, The Seattle Public Library is a shining beacon of how technology and people can work together to ensure access and safety for all.

ZoomBooth: Each Library branch now has at least one ZoomBooth that seamlessly projects a live interactive hologram of themselves to patrons. Staff can be located anywhere, but are usually at one of the branches that have the equipment to capture their presence. This feature is overwhelmingly popular with patrons, including hearing-impaired patrons who can now receive support in ASL at any branch from a live holo-person. Future plans include allowing patrons to record their own holograms.


GreenSpace: Before SafeSpace was launched in 2029, the applications team started GreenSpace, a “smart building” approach for the efficient operation of climate-controlled spaces. This initiative is not just about digital solutions. It includes smart materials, energy generation and improvements to logistics.

OpenTech: The OpenTech program provides an open data resource for the public. It also works closely with other programs to provide technology tools and services for free. Beyond computers, copiers and 3D printers, OpenTech provides educational opportunities and training on the latest in data science, AR/VR, AI and wearables. One of the most popular programs is creating your own AI Assistant.

Jump Bot: Not to be outdone by holo-people, upgraded versions of the telepresence bots that gained popularity during the 2020 pandemic are now being piloted to access materials. Patrons can reserve time with Jump Bots where they beam into the bot and interact with the Library physically.

People First

Of course, technology is only one of the pillars to success for The Seattle Public Library. The main goals of “people first” have been improving trust and increasing visitors at various locations – not just branches. The Library changes its view from “we’re here for you” to “we will be there for you” – meeting people where they are.



Technology advances, such as ZoomBooths, help extend services and programs to all branches. Pilots are now more easily scalable across communities. However, it is the people, a mixture of educated and trained staff and volunteers, who make the experiences meaningful for patrons.

The Library also decentralizes most of its public-facing operations, allowing branches and programs to provide what is needed within their neighborhoods.

Third Space

The term “third space” gains popularity in the 2020s with several meanings, all of which represent the Library of the 2030s. At its core, Library locations are safe spaces where one can meet others and find inspiration, learning, creativity and support. It is not centralized and tends to be very organic. The space remains for everyone to use, though the purpose of the spaces continually evolves.

Branches become the ultimate community gathering spaces, where the public and those who work in public services can come together to collaborate in support of the neighborhood they live in and serve.

ECOSYSTEM ANCHOR

Preferred: Preferred rules



The Library is able to return to its roots as guides to the world of information. Social services and other direct services are distributed to other niches in the community ecosystem that are more qualified to handle them.

The Library is the ultimate service center, serving the community directly and providing support to other community service providers. It is seen as the gold standard of community support organizations. It meets people where they are with services never more than a short distance away from community members.

The Library not only doubles down on its core service of providing information, collections and recreational materials, but it also excels at guiding other organizations in better understanding and using Library information and resources to their benefit.

It is not just about individuals. Many organizations from Parks and Recreation to local nonprofits come to rely on the Library and its programs to better increase their own community engagement and improve their services.

The Library is the leader in community partnerships and helps enable other organizations to provide core services instead of taking on the role themselves. This allows the Library to focus on its core mission of providing information, guidance and community building programs for all. Other agencies see the Library as vital and core to their own success and support the Library on additional funding and financial sustainability. No one wants to take funds from the Library, as the success of the system is seen as crucial to their own success.

Reflecting community values, the Library is also a shining example of how to be green, focusing not on stickers and accolades, but on data and use cases that drive real change in how the Library approaches important sustainability issues. The entire Library fleet is EV or hydrogen powered. The community can easily see direct and indirect impacts through the Library's new "Seeing Green" open data and transparency program.

Spaces feel safe, natural and familiar. There is no fear here (except in the scary books and movies you can find on the shelves). Respect, understanding and appreciation for others is the prevailing culture.

Key changes	Key challenges
<ul style="list-style-type: none">• Community organizations rely on the library in a new and extensive way• Programs are run democratically by community• Shining example of how to be Green• Equity and inclusiveness are well-oiled fixtures in this world	<ul style="list-style-type: none">• No strategy / vision is preferred by all staff and community – some will be disappointed• New partnerships with new activities will likely go through trial & error before we get to this preferred• Organizational readiness• Assess what this means to be deployed in community

Successful programs are not run top down by one or two people, but with direct democratic participation, together with communities.

Knowledge and support are not just gained from media and Library staff, but from other community members and from advanced tech centers that include free maker tools.

Ecosystem Anchor Driver Outcomes

Security Concerns	The Library is a renowned safe space for people of all ages, abilities and cultures.
Money Troubles	Money issues are a thing of the past for the Library. Levies are still utilized, but they are becoming fewer and farther between due to a combination of government funding (city, state and federal) and an increase in generous donations, thanks to new legislation that makes donations to educational institutions in your community a tax incentive.
Controlling the Info	The Library helped usher society out of a time of great distrust. Because of this, the Library is now the bastion of debate, acting as moderator and fact checker. The community focus is now on individual education, and the Library accommodates that, even providing a no-cost degree in civic responsibility.
Staffing Issues	The Library has a robust staff that is augmented by plentiful community volunteers and AI solutions to allow for human employees to focus on human services.
Social Services & Opportunity Gap	Libraries are now adjacent to social service hubs, and the partnership between the Library and the community social service network allow Library workers to focus on library work, and less of the social service work that they were ill-equipped to handle.
Automation & Digitization	There is an overall balance maintained between print and digital Library collections. Many functions that are repetitive and relatively simple are now automated to free up staff time. Every function can be accessed online, allowing the community to access the Library 24/7.
Reaching the People	The Library is where the people are. There are more “right-sized” libraries, and they are closer than ever to the communities they serve. Library programs are community developed and community led, rather than chosen by Library staff, allowing for greater reach and relevance on a hyper-local scale.

Community Anchor & Incubator

The Library is the epicenter of the community, and most importantly, community partnerships. The Library develops partnerships with many community organizations, such as city, state and federal departments, and private groups, and other agencies. The Library also acts as liaison, bringing groups together that can benefit from each other's services and initiatives to create a sprawling community service web.

Culture Wars

The Library has become the arena for civil discourse and debate on the wicked problems of the day. Hosting diverse workshops where differing cultures can gain understanding has anchored the Library as a foundational institution in the community. The Library crosses partisan lines to ensure society has access to truth, knowledge and wisdom.

Shades of Green

The Library leads the way in green initiatives, from EV/hydrogen fleets, to becoming a certified carbon-negative institution. Not only is the Library focused on its own green initiatives, but it also pushes for the community to become greener too.

The Next Tech Wave


Many collections have gone digital, leveraging InterPlanetary File Systems (IPFS) and blockchain methods allows for always available, highly secure systems. AI takes care of many things, such as requests and information retrieval, allowing Library workers the time to focus on more pressing matters. The Library has all the tech it needs, when it needs it, to support the needs of the individual communities served. Augmented and virtual reality is incorporated into the Library, including in programming.

Local News & Archives

The hyperlocality of Library branches enables the Library to collect and store news, cultural artifacts, and history of the communities libraries are in, and is fed into the overall Library News and Archive system. Communities are encouraged to learn how to report and archive these facts, much like Wikipedia, to actively write the diverse history of Seattle.

Ecosystem Anchor Scenario Description

We are living in a new golden age of knowledge, and The Seattle Public Library is at the forefront of this movement. After years of being stretched thin, providing social services that Library staff were ill-equipped to provide, and working miracles with ever-shrinking budgets, a realization was made that the Library was not being used as it was designed or as the staff and community desired.




A period of intense partnership creation began with city, state, federal, and private organizations, to help reimagine the Library ... and it worked. This allowed the Library to return to its roots as the guide to the world of information. Library staff were able to return to connecting patrons with information and began acting as a liaison to the communities they serve. Information referrals included book knowledge, life knowledge and life assistance through referrals to the Library partner organizations. These partner organizations now ensure patrons are served by people qualified to handle whatever issues they may have. Now, when a patron goes to any Library branch, they can access various support agencies, from the Seattle Human Services department to Seattle Parks and Recreation to Seattle Housing Authority, all co-located in the same areas as Library staff. This co-location effort, known as the Seattle Community Ecosystem Initiative, created a symbiotic relationship between the Library and outside agencies, as well as between community members and the Library, creating a sprawling community support hub.

The Library is the center of the community. As such, there are more branches of the Library than ever—These “right-sized” branches allow community members to never be more than a short distance from Library services. Hyperlocal branches have a small footprint that can be adapted to the needs of the community, but bring with them nearly everything one would expect from a large library, due in part to SPL’s adoption of the newest quantum and cloud computing to access their extensive digital collections.

The Library maintains a balance of digital and physical collections that are curated by staff with constant input from the community. Much of the Library’s digital media is stored through the robust InterPlanetary File System, a decentralized storage pool, and accessed through blockchains for ease of sharing, persistent availability, and chain of custody of all materials. All collection use is completely automated, freeing staff to handle other business and helping community members find what they truly need when they need it.

Speaking of staff, the Library was recently voted the best place to work in the United States, and librarians in general are now in the top 10 of fastest growing professions and job satisfaction. The Library maintains a robust, dedicated workforce, and many of the workers seen in branches are also community members of the neighborhoods they serve -- one reason the Library functions at peak efficiency. All programming, for example, is not only chosen but is also run entirely by the community. This bottom-up management style ensures branches are providing programming the community needs while giving ownership to the people. Knowledge is not simply gained from media or Library staff either, but through co-op style learning from members of the community, many of whom are industry leaders with years of experience and expertise. In this way, the Library is a liaison to the community, assisting as needed, and a venue for hosting programming and maker spaces that increase the Library’s support of the community. The Library also partners with multiple large-scale AI solutions to handle many repetitive functions, such as collection inventory and data analysis, using machine learning to dynamically adjust collections held for the ever-changing community needs while keeping budgets in mind.

Collections cost money, and one as extensive as the Library’s is a major budgetary line item. There are still levies used for the Library, but they are relied upon less. Libraries in general have seen great growth in both federal and state funding through various education acts that have been passed. Additionally, tax laws that



made educational institutions better tax shelters have contributed greatly to the financial success of libraries across the nation. The United Library Consortium asked the Library to pilot a program for a free Public Library University, a self-paced learning program that provides a Bachelor of Arts in Civic Responsibility. This was worked on for many years by the Library after years of disinformation and distrust that grew in society. Seattle was at the forefront of the information wars, and the Library became a trusted voice through its fact-checking abilities. Even today, patrons can find everything from community discussions over culturally relevant topics of the day, all the way up to national political debates happening at the Library. The Library offers moderation services and leverages its internally developed AI to fact-check statements of fact in real-time.

As charged as political and social debates can become, the Library is renowned as one of the safest places in the city for people of all ages, cultures and abilities. The Library is designed with the most advanced physical security systems available, but the biggest security measure is that the community holds the Library in such high regard that there is very little need for guards or other overt security. If a patron cannot make it to the Library, most functions are available online. Even much of the programming can be accessed through the national library metaverse. It is not uncommon to see avatars taking part in debates and social discourse at libraries across the nation, integrating with physical groups. Along with the Library being physically secure, it is also digitally one of the most secure networks around. The Library partnered with the University of Washington to be a cybersecurity proving ground. Since the partnership began, there has not been a major breach of Library networks, earning SPL numerous Cybersecurity Excellence Awards and security certifications.

No one can be turned away from accessing the knowledge the Library provides. Aside from digital collections, Library patrons are utilizing AR & VR to access programming specifically designed by industry experts in a myriad of topics. From a master class with a Michelin-starred restaurant chef to learning automotive mechanics with a NASCAR pit crew, all can be done through the Library's neighborhood branches. One of the newest options is to experience books.

All this tech and many branches must mean the Library has a large carbon footprint. That couldn't be farther from the truth. The Library is leading the way in green initiatives. It is transitioning the EV fleet to the newest hydrogen-powered vehicles and working to achieve Certified Living Building status through the International Living Future Institute. Library buildings are becoming completely carbon negative. Additionally, Library staff works to model green initiatives in communities and is seeing great strides in sustainability and eco-consciousness. Patrons often see Library-sponsored workshops with experts in the field, as well as procuring and distributing materials needed by the community to support new environmental policies.

A hyperlocal approach allows the Library to serve as central hubs of all Seattle neighborhoods. It is there to provide knowledge and support to community, no matter the need.

RECOMMENDATIONS

The project focus now shifts from “what might happen” to “what might we do about it.” The scenarios and supporting research, interviews and scanning provide insight on what might happen. The remainder of the report focuses on recommended actions. Two workshops were organized to gather client input – one for the Library staff and one for the Seattle community. The following steps were taken to develop the recommendations:

1. Brainstorm potential implications or impacts of each scenario.
2. Identify strategic issues from the implications.
3. Develop an option or strategic response to each issue.
4. Develop an integrated strategic approach.
5. Identify provocations to monitor.

1. Implications. The process begins with brainstorming the potential implications or impacts of each scenario. We looked at implications specifically across Programs and Services, Collections and Operations. A “Third Order Impact” tool was used to identify these implications. It goes beyond the obvious impacts by exploring the impacts of the impacts.

2. Strategic Issues. Armed with implications, the teams then look at aggregate themes that these implications suggest. The focus is on identifying strategic issues – issues that will be critical to address in the future. They could be either threats or opportunities.

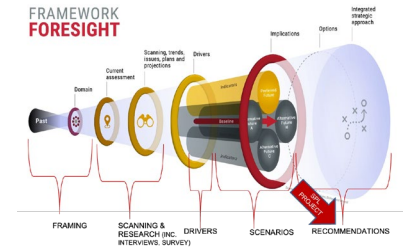
3. Options. The options are potential responses to the issues. An elevator speech tool was used to develop a rough outline of how to strategically respond to the key issues.

4. Integrated Strategic Approach. The final step is to develop an integrated strategic approach. The issues and options to this point are linked to individual scenarios. They provide a sense of how to respond if that scenario were to occur. Now, the goal is to tie the responses together in an integrated fashion; that is, to develop a strategy that works across the entire landscape.

5. Provocations to Monitor. Sometimes there are one-off pieces of research or weak signals that are incredibly interesting and provocative but, because they are so weak, they are not captured in drivers and scenarios. Instead, these could be monitored separately.

Implications

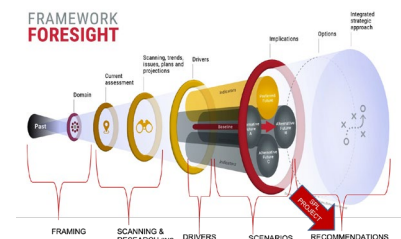
Attendees of the Implications workshops were assigned a specific scenario to ideate 1st, 2nd, 3rd (and sometimes 4th) order implications off of an implied change in the scenario. This is a brainstorming exercise where we like to generate dozens of possible implications. An example of one team's work is below:



KEY CHANGE IN THE SCENARIO	1 st ORDER IMPACT <i>of that key driver</i>	2 nd ORDER IMPACT <i>for each 1st order impact</i>	3 rd ORDER IMPACT <i>for each 2nd order impact</i>
Digital access for all	More devices, more digital literacy service New technology	Digital connectivity	Narrow digital divide
		Hire new staff	Library needs more resources
		Divert resources from collections and program	Library needs more resources
			Traditional users of library go down

Issues and Options by Scenario

The implications provide ideas or raw material from which to construct strategic issues, whether a threat or an opportunity. The strategic issues provide a sharper focus on what ought to be addressed. Our experience as futurists suggests that while identifying strategic issues is a good and useful activity, its value is greatly enhanced by exploring what can be done about them, which we refer to as options. Options are high-level strategic responses to the strategic issues. The strategic options provide specific potential action responses for each issue. The overall strategic approach strategizes how to respond and navigate across the entire scenario landscape and identifies likely and desirable strategic directions or pathways to the future.



A useful tool for capturing the high-level responses is the elevator speech tool. We used a version of the elevator speech tool employed by the Houston Foresight program that was adapted from Strategos, the former company of business guru Gary Hamel. The goal is to capture the essence of how the team might develop a longer-term strategy for responding to the issue, as well as first steps in the present.

In Implications workshops, we generated implications and spent time fleshing the most important implications out in an Elevator Speech Response. This table is a list of the most imperative issues and options/responses. In [Appendix 3](#), we have these elevator speeches listed in detail.

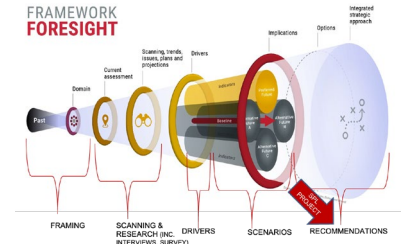
Scenario	Issue	Option
Baseline	Funding shortfall	Prioritize!
Baseline	Reducing buying power for collections	On Demand Collections
Baseline	Keep programs afloat	Programs for the Future
Baseline	If we have to cut something...	Shared services
Collapse	Losing patron who rely on physical access (don't have virtual)	Humans First
Collapse	Collections outpace funding (way too expensive)	Prioritize!
Collapse	Beefing up security	Safe House
Collapse	Big boost in virtual capabilities	Geek Squad
NE	Collection Scope	Library of Things (LOT)
NE	Space usage	Tear down the [cubicle] wall
NE	Staffing challenges	Holistic model
NE	Wealthy donor temptation	Stick to our values
NE	Expand and include	Don't forget the core
T1	Different community needs	Hyperlocalization
T1	Digital Divide	Digital access for all
T1	New Competition (Here come the privates)	Private Eyes
T1	Bring community together	Convenings-R-Us
T2	Staffing	Data-driven Staffing Solutions
T2	Data handling/privacy concerns	Virtual refuge
T2	Help community learn new tech	Incubator
T2	Metaverse as interface	Getting ahead of Metaverse
Preferred	Other agencies relying on library	Community hub/convenor
Preferred	Environmental "stance"	Shades of green
Preferred	More effective partnerships	Relationship manager model
Preferred	Prioritize partnership	Strategic allies
Preferred	Reimagining physical space	Tech centers
Community Preferred	Communicate & measure success	Co-design
Community Preferred	Meet specific community needs	Hyperlocal

Figure 7. Issues / Opportunities

INTEGRATED STRATEGIC APPROACH

A good foresight project provides a sense of direction for moving into the future. Organizations may have a preferred scenario (as The Seattle Public Library does in this project), in which case they can develop a strategy that helps move them toward that scenario. Similarly, organizations may have a scenario they would like to avoid, and they can take steps within their power to avoid it. **However, it is important to note that the organization cannot dictate or choose which scenarios or combinations of scenarios actually happen**, but rather choose how

they will respond to the various scenario possibilities. The future emerges from an amazingly complex interaction of forces and factors that defy control, or even the ability, to precisely predict how they will play out. The logic of scenario planning is to be ready for whichever way the most plausible combinations play out.



There are four typical strategic approaches for a set of scenarios:

- “Bet-the-farm” is a risky approach of focusing on one scenario exclusively.
- “Core-satellite” puts more strategic attention on a scenario or two and develops contingencies for the others.
- “Hedge-your-bets” spreads time and attention roughly equally across the scenarios.
- “Robust” identifies common elements across all scenarios and focuses on those elements.

A useful way to think of these four strategic approaches is that they suggest how an organization can allocate its time, attention, and resources across the scenario landscape.

Suggested Strategic Approach: Robust

It’s our understanding that The Seattle Public Library intends to take the results from this foresight project as “food for thought” into a strategic planning effort kicking off in early 2023. From the Houston Foresight perspective, we selected a robust strategic approach to the scenario landscape based on the outcomes of the Implications workshops. The robust approach aims for common ground across the scenario landscape.

The strategic issues and options nicely fit into seven clusters that are relevant to address in each of the six scenarios.

- Equity – the Library engages and collaborates with community and makes active choices and decisions that lead to outcomes in race and social justice, diversity, equity, inclusion and accessibility
- Staffing – a core element in most scenarios, staffing must be “right” in order to move towards the positive scenarios and avoid the others
- Space – several scenarios anticipate (mostly) physical issues that require advanced planning
- Prioritization – internal and community calls to prioritize the list of Library endeavors

- Localization – calls to “double down” on knowing and reflecting the local community
- Digital proficiency – in some cases to prevent digital attacks and others to take advantage of optimal technology options
- Partnerships – partnering with community organizations

The graphic below shows that the sequence of the scenarios aligns with the Three Horizons model introduced earlier. We always start in Baseline, which is the present system continued. The Three Horizons Framework suggests that a domain moves from Horizon 1 (H1 present system) to Horizon 2 (H2 transition) to Horizon 3 (H3 new system) over time (x-axis). The specific timing of the sequence can vary significantly. It could be that in ten years the domain is still in H1, or perhaps it is just transitioning to H2, or in the relative rare case it moves quickly to H3.

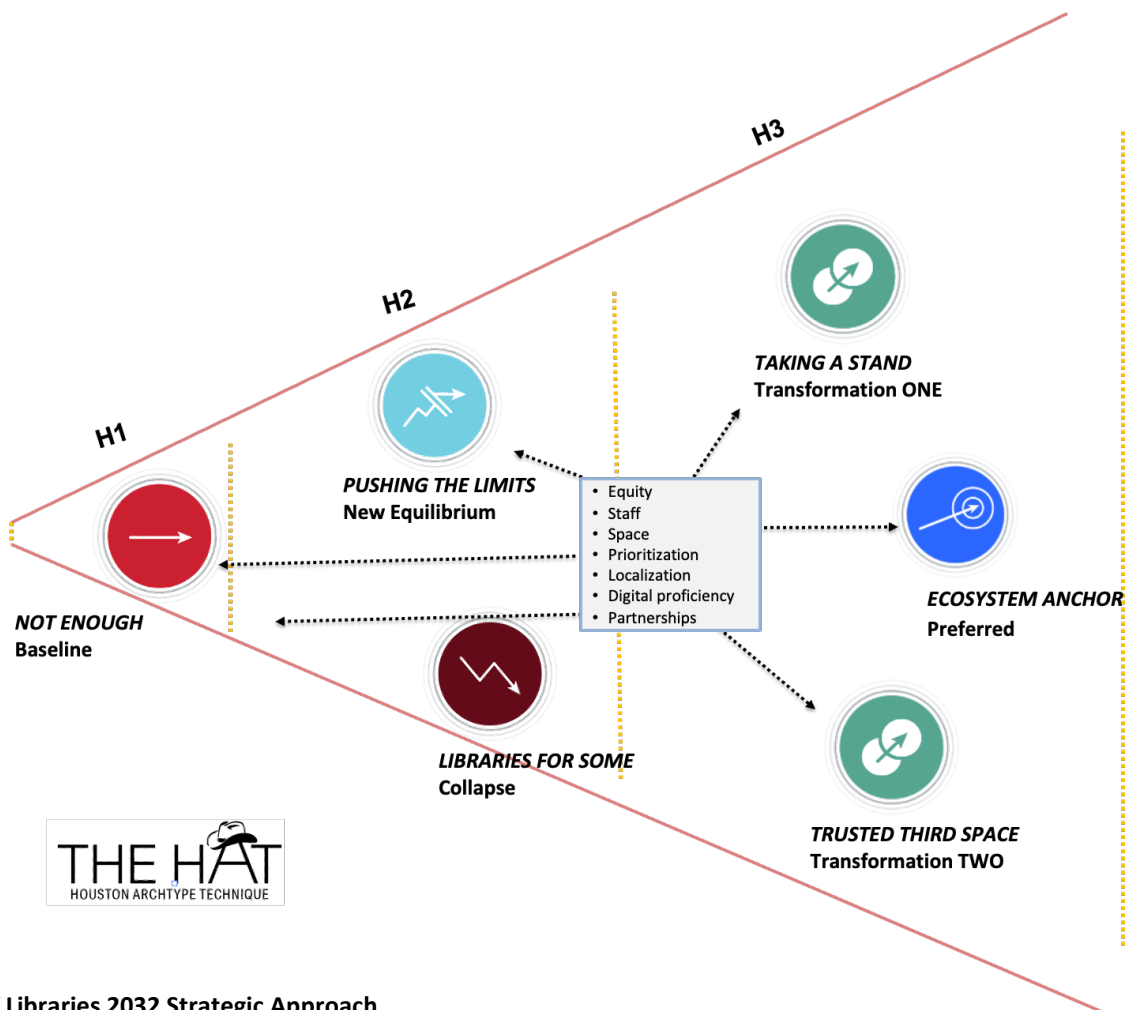


Figure 8. Future of Libraries 2032 Strategic Approach

Provocations to Monitor

The Framework Foresight methodology is one that is deeply attached to the foundational research we do in the early stages of the project. The drivers are a culmination of the research, and we pull out the repeated themes we see and believe will have an impact on the future of the topic. However, this sometimes means there are weaker signals that are not captured in drivers and scenarios. There is some evidence for them in the present, which is noted. They might accelerate and strengthen rather quickly, thus the recommendation is to monitor or keep an eye on these provocations.

The provocations are described by the change to be monitored, an example with brief description and the potential implications for The Seattle Public Library.

Change to monitor	Telehealth expansion
Article title	Delaware to Expand Statewide Telehealth Program (link)
Description of what's in the article	Following a successful pilot test at Delaware's Seaford, Laurel, and Milford libraries, the Delaware Division of Libraries (DDL) is preparing to roll out a new, comprehensive telehealth program to nine additional locations throughout the state by the end of 2022.
Potential implication for libraries / SPL	Telehealth is happening in a big way. Libraries have an amazing opportunity to bridge the gap between healthcare providers and underserved community members who can't afford traditional healthcare, might not live close to doctors, and/or cannot connect digitally.

Change to monitor	Blockchain
Article title	Treasury advances blockchain proof of concept for grant payments (link)
Description of what's in the article	The Treasury Department continues to test a blockchain proof of concept tokenizing grant payments to increase transparency and reduce the amount of reporting recipients must do.
Potential implication for libraries / SPL	Blockchain could greatly reduce the number of steps, and the amount of time and money spent on obtaining grants. For example, a SF-425 report takes eight employees five hours to collect 15-plus data elements. This token process populates the report in seconds.

Change to monitor	Crowdfunding
Article title	Residents raise almost \$100,000 for Michigan library defunded over LGBTQ books (link)
Description of what's in the article	Voters refused to renew tax funds to a library after a small group of parents raised concerns over the availability of LGBTQ-related materials. Crowdfunding has since raised \$100k to keep the library open.
Potential implication for libraries / SPL	Libraries no longer need to remain neutral to receive funding. They can take a stand and refuse to remove materials. Crowdfunding is a viable option that can reach well outside of the community.

Change to monitor	Independent or private libraries
Article title	Fugitive Libraries (link)
Description of what's in the article	Community members feeling underserved and underrepresented by libraries have responded by creating their own independent, itinerant libraries — spaces for learning together and building futures together.
Potential implication for libraries / SPL	Increase in the creation of independent or fugitive libraries will create competition for relevance, expose the public to new definitions of library services and funding—both private donation and public tax dollars.

Change to monitor	Predatory publishing
Article title	<p>Growth of predatory publishing shows no sign of slowing (link)</p> <p>...and...</p> <p>Can Research Lost to Predatory Journals Be Saved? (link)</p>
Description of what's in the article	<p>Predatory or deceptive publishing are terms describing publishers or entities that exploit authors by charging publication fees (commonly known as article processing charges) yet don't deliver on their promise of the editorial and publishing services (such as peer review) that are associated with legitimate publishers. Deceptive publishers typically prey on a researcher's need to publish in order to get an academic appointment, gain promotion, or achieve tenure.</p> <p>These publishers often engage in deceptive and unethical business practices and make false claims about a journal's impact factor, indexing, high standards, and peer review.</p>
Potential implication for libraries / SPL	<p>While this is primarily accomplished within the academic environment, given the fragile nature of periodic non-academic media, this practice could be extended to once credible news sources, such as Time or Newsweek. Carrying such newly predatory media could reflect poorly on public libraries if not discovered in a timely manner.</p>

Change to monitor	New niches in the ecosystem
Article title	Africatown Celebrates the Opening of the William Grose Center for Cultural Innovation (link) (link)
Description of what's in the article	The Africatown Community Land Trust (ACLT) ribbon-cutting ceremony on Sept. 16 marked the end of a week of events celebrating the opening of the William Grose Center for Cultural Innovation. ACLT transforms the decommissioned Fire Station 6 into a technology center dedicated to helping mold Seattle's next generation of tech developers, creative professionals, and future entrepreneurs.
Potential implication for libraries / SPL	Libraries should look into how to work with such entities so that they don't become competitors instead of, perhaps, incubators, collaborators or mentors.

Change to monitor	Plant-based data storage
Article title	Seed Drives: Plant-Based Data Storage Literally Goes Viral (link)
Description of what's in the article	Researchers are researching plant-based storage. By using genetically altered bacterium, scientists could "infect" the DNA of plants with data.
Potential implication for libraries / SPL	With more and more libraries incorporating green space, there may come a day when the Library is the green space. Data being stored in plant DNA is being researched and tested. Imagine walking through a forest library with your reader device to "check out" a book, or listen to the newest hits by Tupac, all stored in the DNA of the plants in the plants.

Change to monitor	Mandatory “volunteers”
Article title	Should Community Service Be a Graduation Requirement? (link)
Description of what’s in the article	Many schools have made community service hours a graduation requirement. Community service requirements ensure students take an active role in their communities while helping add to their transcripts and college applications.
Potential implication for libraries / SPL	Does forcing students to volunteer defeat the purpose of it being genuine and building the desire to help build one’s community? Could libraries, especially in densely populated areas, partner with high schools to tap into this free labor pool?

Change to monitor	IP Donor
Article title	Life After Death: Becoming an Intellectual Property Donor (link)
Description of what’s in the article	As intellectual property becomes a hot topic, artists are looking at ways to ensure their property is distributed in accordance with their wishes upon death. Evan Roth created a sticker to affix to a driver’s license, like that of the organ donor signifier.
Potential implication for libraries / SPL	As the digital collections landscape changes to include increasing costs for digital rights for libraries, grassroots movements like these by authors could help save the ability for libraries to continue to loan collections to patrons economically. How will the Library leverage opportunities like these in the future? How can the Library act as incubator for partnerships between Library and author?

Change to monitor	From DEI to Values Fit
Article title	The End of Culture Fit (link)
Description of what's in the article	Many companies are striving for diversity and inclusion. The term "culture fit" is falling out of favor due to the bias that it creates. Australian-based Atlassian is reframing their approach to a "values fit" focus that starts even during that application and interview process.
Potential implication for libraries / SPL	By selecting applicants who align with desired values, companies can grow and be considerate of all cultures with transparency, empathy and desire to be a positive change agent.

Change to monitor	Ecosystem Expansion
Article title	Library to add post office Dec. 8 (link)
Description of what's in the article	Maricopa, IN added a post office to its public library. This post office was placed after the city was awarded a contract through the USPS.
Potential implication for libraries / SPL	As governmental budgets get tighter, organizations will need to find dollars wherever they can. The struggles of the USPS are not a secret. By finding governmental facilities that libraries can partner with, not only does this help both facilities budgets through shared fiscal benefits, but it also drives traffic to libraries. The space could be there with shrinking physical collections.

Use of the Report

We understand it is the Library's intention to feed the learning from this project directly into the next strategy or strategic planning activity – this is one of the most prevalent uses of foresight work.

As consulting futurists, our job is to illuminate plausible ways the future of libraries could play out given the research and methodology uses for scenario development.

At the end of this foresight project, the Library has:

- The raw data the Houston Foresight team used to develop the 14 drivers
- Six plausible, yet provocative, ways in which the future of libraries could play out (including a preferred future)
- Implications turned into issues and options for action (5-6 for each scenario)
- Analyzed “super seven” issues we recommend are addressed now / together. These issues are a part of all six scenarios

It is hoped that these results, and the background research that went into them, provide a useful starting point for the strategic plan. There is some overlap of the foresight work into the strategic planning work. Please take any overlap as suggestions. It is difficult to know exactly where to draw the line.

As futurists, we see the super seven issues as:

- Equity – the Library engages and collaborates with community and makes active choices and decisions that lead to outcomes in race and social justice, diversity, equity, inclusion and accessibility
- Staffing – a core element in most scenarios, staffing must be “right” in order to move towards the positive scenarios and avoid the others
- Space – several scenarios anticipate (mostly) physical issues that require advanced planning
- Prioritization – internal and community calls to prioritize the list of SPL endeavors
- Localization – calls to “double down” on knowing and reflecting the local community
- Digital proficiency – in some cases to prevent digital attacks and others to take advantage of optimal technology options
- Partnerships – partnering with community organizations

And recognize all of these need to be translated much further into more detail through the strategic planning process. Some suggestions that emerged during our project that might be useful to consider in the strategic planning are:

- Detail what each of these super seven issues looks like in each scenario
- Determine what each of these issues mean for:
 - o Staffing
 - o Training
 - o Other units within the organization beyond Public Services, such as HR, Comms & Marketing, IT, etc.
 - o Partnerships
- Assess of The Seattle Public Library's organizational readiness
- Identify limited resource challenges that need to be addressed
- Develop a roadmap to create the change between now and these scenarios (e.g. funding between now and then looks very different)
- Build all of these out to be more specific with the Library and the unique communities it serves (i.e. the scenarios may feel too library focused and the Library will likely want to rethink these with a community-centered approach)

The other typical uses of a strategic foresight project like this are:

1. Innovation sessions. Use the scenarios, drivers and supporting research as content for innovation sessions aimed at developing new offerings and services. The workshop may range from a few hours to a half-day or even full day. The idea is to use the material to stimulate thinking about the future and provide groups with tools and exercises to translate that into specific initiatives that the group might pursue.
2. Deep dives. Individual issues or drivers could be explored more comprehensively through a Deep Dive.
3. Horizon scanning system. Set up an ongoing Horizon scanning system. The full inventory of scanning hits housed in cloud-based collection system developed for this report can be accessed separately. It would serve as a starting point for the team to build from and develop its own inventory. An ongoing horizon scanning system can both:
 - a. Identify new emerging issues – opportunities and threats
 - b. Monitor for changes suggested by the drivers and scenarios and provide insight to strategy on how the future is unfolding, including which scenario(s) the future seems to be moving toward or away from

In addition, drivers, trends and supporting research can be the foundation of building an ongoing futures inventory or knowledge base that can be added to with each project, as well as provide a starting point for new projects.

APPENDICES

APPENDIX 1. PROJECT TEAM

SPL Core Team

Tom Fay

Daria Cal

Jennifer Cargal

Valeria Garrett-Turner

Laura Gentry

Elena Gutierrez

Rachel Scott

Rich Sheridan

Helen Tapping

Tess Wilder-Cervantes

Alex Yoon

Houston Foresight team

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Laura Schlehuber – Project Leader

April Koury – Alumni

Garry Golden – Alumni

JT Mudge – Alumni

Kiran Carpenter – Student Researcher

Rich Erwin – Student Researcher

Christopher Solomon – Student Researcher

APPENDIX 2. ABOUT THE HOUSTON FORESIGHT PROGRAM

The Houston Foresight program is the world’s longest-running graduate program solely focused on foresight. It offers education and training in futures thinking and methodologies in a variety of formats that are customized for different learners with different needs – from virtual “boot camps” to a four-course graduate certificate to a full Master’s degree. It also performs research on futures-oriented projects to benefit the community and business, government, education, and non-profit organizations.

Our vision is to be widely recognized as the premier training ground for professional futurists and for those seeking to futurize their lives and their organizations.

Our mission is to serve aspiring professional futurists and the world by providing high-quality foresight training to help individuals and organizations in business, government, education, and non-profits realize their preferred futures.

For more information, visit <https://www.houstonforesight.org/>

APPENDIX 3. ISSUES AND OPTIONS

BASELINE

ISSUE <i>What is the issue?</i>	We are not sufficiently funded to meet current hours and operational priorities.		
OPTION <i>Response: How will we respond to this issue?</i>	Prioritize! <ul style="list-style-type: none"> • Reduce open hours and explore other means for access to the library • Prioritize resources, programs, and services 		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	To maintain community satisfaction with the library. Patrons see value in the library and receives desired services.		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Understand current state of library programs and services Surveys	<u>Phase 2</u> Community connection / dialogue Develop hypothesis and action steps	<u>Phase 3</u> Communication of the plan / strategy Implement
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	LPSD LT&SMT		

BASELINE

ISSUE <i>What is the issue?</i>	Reduced "Buying power" of collections are further reduced by inflation costs
OPTION <i>Response: How will we respond to this issue?</i>	On Demand Collections <ul style="list-style-type: none"> • Explore on demand model • Prioritization of print purchase model (expensive / specialized collections)

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

To maintain community satisfaction with the library.
Patrons see value in the library and receives desired services.

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

<u>Phase 1</u> Current state assessment –what does reduced buying power of collections look like today and in the future? How could an on-demand model help this issue?	<u>Phase 2</u> Review and resolve expectations with new on-demand model with staff and patrons	<u>Phase 3</u> Implement Monitor regularly for feedback and needed updates
---	---	--

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Collection services manager
LPSD LT & SMT

BASELINE

ISSUE

What is the issue?

Keep programs afloat

OPTION

Response: How will we respond to this issue?

Programs for the Future
Look for ways to save those programs and services that you know you want in the future

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

In this world of doing too much, not keeping up with demands and not having the funding to do more, we must prioritize and fight for the programs and services we must keep in the future

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

<u>Phase 1</u> Current state assessment –list and analyze all programs, services, collections, operations, etc. Determine how to assess which of these are priority (survey? Small internal group?)	<u>Phase 2</u> Once SPL is clear on the elements they want to save... Determine how to save them (mostly by eliminating other elements and doubling down on these)	<u>Phase 3</u> Implement Monitor regularly for feedback and needed updates
---	---	--

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Management

BASELINE

ISSUE <i>What is the issue?</i>	If we have to cut something we like, can we give it to another group for safekeeping?		
OPTION <i>Response: How will we respond to this issue?</i>	Shared services Work with other stakeholders in the community ecosystem		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	This is attached to the Keep it Afloat issue. We won't be able to completely eliminate the other elements we don't have on the list in Keep it Afloat		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Strategize – which programs / services etc. that we at SPL can't hold onto do we want to advocate for someone else to own?	<u>Phase 2</u> Tap into and grow our partner groups. Determine what the incentive is for another group to own one of our traditional programs	<u>Phase 3</u> Hand over the program and engage more with this partner in the future
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Management		

COLLAPSE

ISSUE <i>What is the issue?</i>	We risk losing patrons who do not have virtual access to library programs and services		
OPTION <i>Response: How will we respond to this issue?</i>	Humans First We prioritize human connections, and we double down on community listening and serving patron needs		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	We serve a diverse public and need to nurture our community. We're more relevant when we serve our community.		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Invest in engagement programs and have the staff available to connect w/ community	<u>Phase 2</u> We prioritize organization-wide engagement to grow and build community partnerships	<u>Phase 3</u> Partnerships building our core of advocates and library champions, creating a place for everyone to participate.
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Institution and strategic advancement		

COLLAPSE

ISSUE <i>What is the issue?</i>	Collection costs drastically outpace available funding streams due to available public funding, costs of digital materials and licensing		
OPTION <i>Response: How will we respond to this issue?</i>	Prioritize!		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	Increased costs will limit depth and breadth of materials and reduce access but the public relies on the library for a rich collection of materials.		

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

Phase 1

Current state assessment –how are these increased costs really impacting collections? Get a clear look

Determine how to assess which of these are priority (survey? Small internal group?)

Phase 2

Once SPL is clear on the collections they will continue to support and make thrive, strategize on how to do this

Phase 3

Implement
Monitor regularly for feedback and needed updates

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Collections management

COLLAPSE

ISSUE

What is the issue?

How do we keep our patrons and staff safe?

OPTION

Response: How will we respond to this issue?

Safe House

The only staff increase we can afford is security

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

In this world, culture wars are causing threats and security incidents

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

Phase 1

SPL manifesto – we won’t tolerate this!

Phase 2

Keep a period of heightened security to implement boundaries and punishment for breaking those boundaries

Phase 3

This should mitigate security threats and allow for hiring other types of staff. If not, return to phase 1.

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Management and security

COLLAPSE

ISSUE <i>What is the issue?</i>	Growing reliance on virtual operations increase need for technical staff		
OPTION <i>Response: How will we respond to this issue?</i>	Geek squad Big boost in virtual capabilities		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	Technology (AI, automation, etc.) is a big part of this scenario. We anticipate a potential rocky adjustment		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> SPL manifesto – we won't tolerate this!	<u>Phase 2</u> Keep a period of heightened security to implement boundaries and punishment for breaking those boundaries	<u>Phase 3</u> This should mitigate security threats and allow for hiring other types of staff. If not, return to phase 1.
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Management and security		

NEW EQUILIBRIUM

ISSUE <i>What is the issue?</i>	Collection scope grows
OPTION <i>Response: How will we respond to this issue?</i>	Library of Things (LOT) Expand the scope of items that can be borrowed from the library
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	As the community and staff move in the direction of more collections and wanting to borrow community items from the library, SPL must plan for LOT

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Define L.O.T. scope
 Plan for what to onboard and how to manage (logistics, operations, needs)
 Create “storage” place offsite & onsite
 Identify access & Fulfillment Solutions

Phase 2

Communicate
 Train
 Coordinate

Phase 3

Improvement
 Iterate
 Utilize Partners/Companies to Provide L.O.T. (Museum Pass Model?)

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Cross Divisional Team & Partners

NEW EQUILIBRIUM

ISSUE

What is the issue?

Space use reflects that past rather than the future

OPTION

Response: How will we respond to this issue?

Tear down the (cubicle) wall
 Reconfigure use of space to align with future direction

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

This scenario implies a large change to the operations inside the library, most notably to hygiene centers and LOTs.

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Scoping project (when, where)
 Shift in which services

Phase 2

Community input & engagement
 New Jobs (Maintenance, Security) Staffing Model

Phase 3

Execution & Maintenance & Operationalizing

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Project Manager
 Cross-Functional Team
 Vendors

NEW EQUILIBRIUM

ISSUE <i>What is the issue?</i>	Staffing challenges		
OPTION <i>Response: How will we respond to this issue?</i>	Holistic model Reconsider staff needs in light of future direction		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	Staffing in this New Equilibrium is a challenge (retention, recruitment, training & re-training, capacity, morale, buy-in)		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Engage Staff & Union in defining the work and staffing it appropriately Transformational leadership needed for internal & public positive reception Strike balance on what’s possible/what’s aspirational	<u>Phase 2</u> Manage Staff transition in respectful way Clear Direction Reassign people based on their interests Create new job roles with retirements Develop new expertise Be willing to “fail” Be willing to stop doing some things	<u>Phase 3</u> Convene and prepare holistic change management & training Retraining approach Hygiene Center Library of Things Facilities/Security Ongoing Teambuilding & XF Relationship-building Utilize change management
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Senior Leadership		

NEW EQUILIBRIUM

ISSUE <i>What is the issue?</i>	Wealthy donor temptation in which the donation or strings attached conflict with SPL values		
OPTION <i>Response: How will we respond to this issue?</i>	Stick to our values Redirect donors to ecosystem partners who could benefit from the donation, i.e., “here is someone who can better use it”		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	There may be “pressure” from avenues of funding to direct library activities in a certain direction (in this scenario, the push it towards all social services)		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Be prepared for this issue. Know what you want to accept (will be easier with a strong vision)	<u>Phase 2</u> Understand other cogs in the community and know where to suggest that money be redirected to	<u>Phase 3</u> Stay involved as needed / desired
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Community relations (whoever is responsible for dealing with donors has the lead on this, but it is part of the entire organization)		

NEW EQUILIBRIUM

ISSUE <i>What is the issue?</i>	Expanding the range of services and/or Library of Things could lead to overlooking traditional core patrons		
OPTION <i>Response: How will we respond to this issue?</i>	Don’t forget the core As scope expands, be sure to maintain core patrons		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	This scenario implies a large change to the operations inside the library. We need to do this in a way that retains our core patrons		

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Plan to make these large changes more palpable to staff and community by implementing changes in phases

Phase 2

Gather community feedback. Townhall style?
Implement regular way to monitor core patron opinions and collect feedback

Phase 3

Keep communication going as all changes are implemented

WHO "OWNS" IT?

Responsibility: Identify the long-term internal champion for the issue and option

Program managers

TRANSFORMATION 1

ISSUE

What is the issue?

The various communities have different needs

OPTION

Response: How will we respond to this issue?

Hyperlocalization

Treat each branch as its own entity with own needs and tailor offerings appropriately

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

To best serve neighborhoods and communities, we can plan to go hyper local on the branches so that we create a richer, more impactful experience for the community

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Develop new and advanced ways to understand the community needs and wants

Phase 2

Develop implementation and pilot in two distinctly different neighborhoods

Phase 3

Decide on a collectively owned model tailored to the needs of the community
Create "Neighborhood Branch" specialized branch that's based on the needs of the specific community

WHO "OWNS" IT?

Responsibility: Identify the long-term internal champion for the issue and option

Community interest branch that could be local or city

TRANSFORMATION 1

ISSUE <i>What is the issue?</i>	Digital Divide		
OPTION <i>Response: How will we respond to this issue?</i>	Digital Access for All As library expands digital offerings, be sure that access is maintained for all patrons and not just wealthy		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	There is a huge and growing divide in digital access and literacy, resulting in increased economic and social disparities. We could reinvent the Hotspot program to have greater impact for those who really need them		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Figure out: What is the scope of this program? Who needs to be served? What do they need? Develop plan and resources	<u>Phase 2</u> Make plan real	<u>Phase 3</u> Implement
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Dept of Planning and Impact – new approach to planning and impact proofing		

TRANSFORMATION 1

ISSUE <i>What is the issue?</i>	New competition (here comes the privates)		
OPTION <i>Response: How will we respond to this issue?</i>	Private Eyes Keep our eyes on the growth of private options and the reasons why patrons might be turning to them		

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

In this world there is competition to the traditional public library from private libraires that are showcasing materials that are in line with certain value sets

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Start internal team to monitor this

Phase 2

Monitor – if the private libraries got too big it may indicate our values are reflecting the community

Phase 3

Understand difference and change accordingly

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Management and city

TRANSFORMATION 1

ISSUE

What is the issue?

Bring community together

OPTION

Response: How will we respond to this issue?

Convenings-R-Us

The library is uniquely positioned to be a major convenor of community events with beautiful space and widespread community support.

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

We can celebrate our community in deeper ways now that we have doubled down on our values!

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Start internal team to work on how to make the community feel special

Phase 2

Plan community gatherings

Phase 3

Draw on what works and continue to build strong community relationships

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Internal team that’s owning this

TRANSFORMATION 2

ISSUE <i>What is the issue?</i>	Staffing 2.0: need to update staff skillset as offerings change		
OPTION <i>Response: How will we respond to this issue?</i>	Data-driven Staffing Solutions Use available data to help align staffing with emerging future need areas		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	Current staffing may not have the skillset for the changes in this scenario. We need to adjust to changing community needs and interests with a data-driven solution		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Assessment of current capacity skillsets Develop guiding principles to reach service goals and hiring and development push Demographic analysis of neighborhoods Assessing our hiring practices – identifying barriers and biases Assessing our training program & requirements	<u>Phase 2</u> Develop internal support structures to support new staff to be on-boarded Develop hiring and development plan with stakeholders at the table Make it an adaptable plan	<u>Phase 3</u> Implement hiring & development plan Leverage skillsets that are needed by community regardless of role or classification Begin launching services and programs that this new model enables – open data, neighborhood level collections & programs
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Human Resources – driving division Public Services – biggest impact MDS/Comms – promotion, internal communications, public/media awareness		

TRANSFORMATION 2

ISSUE <i>What is the issue?</i>	Data handing / privacy concerns		
OPTION <i>Response: How will we respond to this issue?</i>	Virtual Refuge The library is already a physical refuge; let's extend that to the virtual space.		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	We anticipate data and privacy concerns in this world Note: More internal data about patrons or residents (should be disaggregated & anonymous)		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Data Audit & assessment of Library, partners and vendors Develop roadmap with milestones Develop initial Communications plan (internal) Explore data available from other libraries and partners Create Governance Committee	<u>Phase 2</u> Determine the future state of Data Staff Assessment of Skills, Resources and Capacity Press vendors for data ownership and to have them adhere to Library privacy Engage community to build more trust	<u>Phase 3</u> Mature Data Governance Staffing needs and capacity met Develop Communications and Marketing plan for Library as Virtual Refuge Begin launching services that enable the Library as Virtual Refuge
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Data Governance (cross divisional) Also may include public or community partners		

TRANSFORMATION 2

ISSUE <i>What is the issue?</i>	Community needs to learn new tech
OPTION <i>Response: How will we respond to this issue?</i>	Incubator The library takes the lead on training community on emerging technologies

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

With all of this new technology, how will we be able to make sure our community can use it all to their benefit?

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Put a plan in place for how to introduce new tech to the community

Phase 2

Host tech companies to provide learning demos for community

Phase 3

Monitor and change plan as needed

WHO "OWNS" IT?

Responsibility: Identify the long-term internal champion for the issue and option

Tech team

TRANSFORMATION 2

ISSUE

What is the issue?

The metaverse is emerging as the interface to the virtual world, but many people are lost or afraid of it

OPTION

Response: How will we respond to this issue?

Getting Ahead of the Metaverse

The current struggles and slow rollout of the Metaverse provides a window of opportunity to learn and understand and bring the community along as it eventually does roll out.

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

With all of this new technology, how will we be able to make sure our community can use it all to their benefit?

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Put a plan in place for how to introduce new tech to the community

Phase 2

Host tech companies to provide learning demos for community

Phase 3

Monitor and change plan as needed

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Tech team

PREFERRED

ISSUE <i>What is the issue?</i>	Other agencies may be increasingly relying on library to provide social and other non-traditional services		
OPTION <i>Response: How will we respond to this issue?</i>	Community hub / convener The library willingly steps into the role of organizing a systemic response to providing services by identifying and arranging which partners are best to provide the services		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	Partnerships allows for additional services to our patrons Better referral to community resources Creates a more cohesive network of city/governmental services that currently does not exist		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Establish forums with city government and community partners Assessment of internal assets (What do we have to offer as convener i.e.: Meeting spaces, equipment offerings, etc.)	<u>Phase 2</u> How do we leverage assets we identified? (leverage website)	<u>Phase 3</u> Assess asset development or increase (add more meeting spaces?)
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	ISA, PS, SMT		

PREFERRED

ISSUE <i>What is the issue?</i>	What should our environmental “stance” be?
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OPTION <i>Response: How will we respond to this issue?</i>	Shades of green Community be aligned with community views)		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	The library is a carbon neutral organization that leads by example and inspires the public to participate in the sharing economy that centers on environmental responsibility. Library buildings provide reliable respite against climate extremes		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<u>Phase 1</u> Hire specialists in understanding how to implement the biggest “bang for our buck” on going green	<u>Phase 2</u> Follow the specialists’ plan!	<u>Phase 3</u> Collect community feedback and make changes as needed
WHO “OWNS” IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Management		

PREFERRED

ISSUE <i>What is the issue?</i>	How can we establish more effective partnerships so that we don’t have to do everything ourselves?		
OPTION <i>Response: How will we respond to this opportunity?</i>	Relationship manager model Adopt relations manager model to provide great focus and accountability to partnership development		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the opportunity is worth responding to</i>	Bringing together organizations to provide service to <u>all</u> patrons <ul style="list-style-type: none"> • Optimizes budgets • Excellent services (already happening) • Reduces Mission Creep 		

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

Phase 1
One role responsible for managing overall partner relationships including CRM to mitigate single point of failure when folks leave
Partnering with foundation

Phase 2
Strategic planning baseline & future
Expectation setting
Staff training (roles/telling our story)

Phase 3
Alignment – Advocacy/ Donors/ Foundation/ Friends/ Staff

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

DISA (redefined role; not current role as defined), ELES, Public Services, Government/Partnerships

PREFERRED

ISSUE

What is the issue?

We have so many partners!

OPTION

Response: How will we respond to this issue?

Strategic allies
It is okay to acknowledge that some partners are more vital and need extra attention.

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

Our existing programs approach is not stable or sustainable. It isn’t necessarily what is needed (It’s hard to sus out needs)
This new model allows for creation of long lasting, impactful programming and can evolve as community needs change

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project
Hint: Phases may be the same as the Horizon years

Phase 1
Create a department of planning and impact
Create model/architect of this approach

Phase 2
Determine approach to finding best partners to codesign, but transparent about how they are chosen (e.g. Racial equity lens)
Create buy-in then the codesign process (Democracy)

Phase 3
Our residents are supportive, engaged, and utilizing what has been created

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Department of Planning & Impact

PREFERRED

ISSUE <i>What is the issue?</i>	How can we make better use of our physical space?		
OPTION <i>Response: How will we respond to this issue?</i>	Tech centers Reimaging physical space for the increasingly virtual world		
WHY IS IT IMPORTANT? <i>Rationale: Describe why the issue is worth responding to</i>	<p>We need to restructure physical space/acquiring space to enable technology centers</p> <p>Assess physical facilities for expansion/remodel</p> <ul style="list-style-type: none"> • Review real-estate acquisition possibilities • Needs assessment for community needs/opportunities • IT assessment and of infrastructure/support • Create opportunities for community & developing skillsets in patrons (navigators) 		
WHAT SHOULD WE DO ABOUT IT? <i>Strategic response: List the key components of your long-term strategy across the timeframe of your project</i> <i>Hint: Phases may be the same as the Horizon years</i>	<p><u>Phase 1</u></p> <p>Understand the community need and existing resources</p> <p>Understand where the need is (not CEN-tric)</p> <p>IT analysis of infrastructure and support and replacement plan (Total cost of ownership)</p> <p>Skillset needs for support</p>	<p><u>Phase 2</u></p> <p>Communication/ outreach</p> <p>Training/starting</p> <p>Build out & acquire spaces</p> <p>Partnerships & volunteer recruitment</p> <p>Youth programming</p>	<p><u>Phase 3</u></p> <p>Developing/launching the program & platform</p> <p>Gallery of output (on platform)</p> <p>Scale & optimize technology</p>
WHO "OWNS" IT? <i>Responsibility: Identify the long-term internal champion for the issue and option</i>	Management		

COMMUNITY PREFERRED

ISSUE <i>What is the issue?</i>	How might libraries more effectively communicate their offerings and measure their success?
OPTION <i>Response: How will we respond to this issue?</i>	Co-design The best way to meet needs is to work together from the start

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

The library has so many offerings! How can we more effectively prioritize them? It can be difficult to know what are most useful and effective as many times community members are not aware of the offerings.

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy across the timeframe of your project

Hint: Phases may be the same as the Horizon years

Phase 1

Relationship specialists work more closely to identify needs and develop programs with the community organizations in a co-design approach.
Goes beyond surveys to directly working together

Phase 2

More tailored offerings will help deal with the time/budget/staff issues that can become burdensome when there are too many disparate offerings
Library becomes better at stopping doing things; some added = something dropped
Library more effectively helps its partners deal with the “overwhelmed” feeling

Phase 3

Leadership demonstrates commitment and provides support for relationship specialists to do their work and meet the unique needs of different community partners

WHO “OWNS” IT?

Responsibility: Identify the long-term internal champion for the issue and option

Communications
Institutional advancement

COMMUNITY PREFERRED

ISSUE

What is the issue?

How can we better meet specific community needs by offering programs and services in the community where needed, as well as bring the community more effectively into the library space?

OPTION

Response: How will we respond to this issue?

Hyperlocal

Bring the library to the community and the community to the library to better meet the unique needs of different communities

WHY IS IT IMPORTANT?

Rationale: Describe why the issue is worth responding to

Communities are not all the same. Each has its own unique needs based on differences in ethnicity, income level, age profile, accessibility, etc. There is an opportunity to more effectively meet the needs in the community where they are, as well as to provide co-location opportunities for community groups to work directly in the library spaces.

WHAT SHOULD WE DO ABOUT IT?

Strategic response: List the key components of your long-term strategy

Phase 1

“Partnership specialists” work on needs assessment together with front-line community people,

Phase 2

Sorting through the massive list of potential partners to identify “strategic allies”

Phase 3

Equitable access to relevant programs and services

across the timeframe of your project

Hint: Phases may be the same as the Horizon years

supplement with survey for gap analysis

DEI and cultural competency training if or as needed

Developing the specific programs and services in the “right” locations

Offer co-location opportunities for communities to host thematic collections/events/etc.

WHO “OWNS” IT?

*Responsibility: Identify the long-term **internal** champion for the issue and option*

Partnership specialists with senior leadership support

APPENDIX 4. TREND INVENTORY

Social Trends

Microlearning	Individuals will continue to learn via smaller sized content - often bundled into content threads.	link
DIY health	Armed with new technologies and influenced by shifting values, US consumers continue to take a more central role in decisions about their own healthcare.	link
Social prescriptions for wellness	Social prescribing is when health professionals refer patients to support in the community, in order to improve their health and wellbeing. The goals of social prescribing are to reduce the rise of healthcare costs and easing pressure of general practice clinics.	link
Empowered health consumers	Empowered consumers are turning to the Internet first—before consulting doctors about health problems—and in many cases are diagnosing their own conditions.	link
Looming shortage of caregivers	According to PHI (formerly the Paraprofessional Healthcare Institute), in 2020 the direct care work force—by that point, about 5 million strong—will become the most prevalent occupation in the United States, surpassing the number of retail salespeople.	link
Racial inequity	Racial disparities in the United States manifest significant impacts to wealth, health, safety of BIPOC individuals and communities. National visibility of the issue has increased significantly in 2020 with increasing public commitments by corporations and governments to take action to improve.	link
Remote care	Telemedicine is the use of telecommunications technology for the remote diagnosis, treatment, and care of patients. Applications of telemedicine are starting to play a bigger role in healthcare, and will only grow in the coming decade.	link
From reactive to proactive healthcare	More Americans are taking a proactive preventive approach to healthcare, adopting lifestyles and diets intended to keep them healthy.	link
STEM focus	Education is focusing on offering more STEM curricula.	link
Ubiquity of germs	There's a growing awareness that the objects we touch most have hundreds of thousands of germs. Different types of surfaces may hold the key to cleaner spaces.	link
Wellness focus	Health consciousness and the idea of wellness are growing, especially in World 1. A growing number of consumers are focusing their attention on physical and mental fitness, diet, and hygiene.	link
Aging	The average age of the population continues to rise	link
Aging-friendly communities	The aging population is seeking to stay healthy and active longer, and is looking to communities for support	link
Corporate social justice	Corporate social justice reframes corporate social responsibility by focusing on initiatives or programs on the measurable, lived experiences of groups harmed and disadvantaged by society. Consumers and other stakeholders are increasingly seeing social good as a necessity and not just a marketing strategy	link

Fluid gender and sexual orientation	Gender and sexual orientation are increasingly understood as less biologically constructed and more of a fluid social construct, with both gender identity and sexual orientation falling along a wide-ranging spectrum.	link
Gentrification	Gentrification and displacement of long-time residents is most intense in the nation's biggest cities, as rapidly rising rents, property values, and taxes force residents to move away.	link
Mindfulness	Meditation is becoming more mainstream in America, due in part to smartphone apps, as well as the rise of wellness culture and increasing "burnout".	link
Multigenerational households growing	About 45% of US households now include two or more adult generations.	link
Neotribalism	Neotribalism is on the rise as extreme partisan politics drives citizens into "us vs. them" camps. Studies have found that partisanship or non-cooperation in the U.S. Congress, for example, has been increasing exponentially for over 60 years with no sign of stopping.	link
Traditional families shrinking	Traditional families continue to shrink—cohabitation is rising, increasing numbers of adults are delaying or not marrying at all, more children are living with an unwed parent, and same-sex marriage is legal across the US.	link
Trust declining	Americans reportedly trust each other less. About seven-in-ten Americans (71%) think people are less confident in each other than they were 20 years ago.	link
Virtual communities	Virtual communities built around shared interests are increasingly connecting like-minded people on the Internet.	link
Voluntary simplicity	A small but growing portion of consumers are downshifting, cutting back on their work or lifestyle in order to lead a more fulfilling and balanced life. To date, this trend has largely been voluntary.	link

Technological Trends

5G and beyond	The global 5G infrastructure market size was valued at \$371 million in 2017 and is projected to reach \$58 billion by 2025; it will boost the mobile experience with reduced latency, low cost-per-bit, and consistent and higher data speeds	link
Augmented reality	Augmented reality (AR) systems supplement a user's real world with digitally created visual and aural information including text, graphics, 3D animation, and sounds, producing information streams that lie somewhere between reality and virtual reality.	link
Automation and job loss	A recent PwC report suggests automation-related job loss will start to be felt in the mid-2020s – with 10-15% of jobs in three sectors (manufacturing, transportation and storage, and wholesale and retail trade), and by 2035, the range of jobs with high automation potential will be closer to 35-50% for those sectors.	link
Big data, big opportunities	Big data is poised to become increasingly important to businesses, governments, and consumers.	link
Consumer-centric AI	AI-based automatic monitoring is becoming crucial to the viability of e-commerce, with AI software being used to detect fraud and expedite online transactions. The Web has given AI developers a new platform for creating consumer-oriented services and software. Web-based consumer AI applications now range widely, from smarter search engines to portfolio management, gaming, and online translation services.	link

Continuous monitoring & data collection	IoT extends to always on monitoring/gathering of data.	link
Germ fighting	Increasingly, design is tackling the threats of bacteria and microbes, either through materials used or how buildings are laid out to minimize contact point/germy surfaces.	link
Government transparency	As increasing numbers of government entities continue to go digital to save time and money, citizens are able to access and review government processes and digital data, increasing government transparency.	link
Growth of automation and prediction systems	The expansion of automation and prediction systems will continue to grow through the use of predictive analytics, machine learning technologies, Internet of Things (IoT), and other intelligent infrastructures.	link
Information fusion	Ubiquitous analytics will make it possible for consumers to generate useful insights about their own habits and behaviors by fusing personal data (e.g., social media profiles, tweets, location data, purchasing histories, health sensor data, etc.)	link
Internet of Things	McKinsey estimates the economic impact of the IoT globally and across industries to be between \$14 trillion and \$33 trillion by 2025. At the end of 2019 there were 7.6 billion active IoT devices, a figure which will grow to 24.1 billion in 2030 at a compound annual growth rate of about 11%.	link
Open data access, privacy, and security	Privacy and security of personal information, such as education and medical records, will be of increasing concern as more data are shared through electronic medical records, mobile devices, and social networks.	link
Open source	Open technology standards are enabling the creation of hardware and devices with greater options for connectivity and interoperability.	link
Rise of anti-microbial/anti-bacterial design	Increasingly, design is tackling the problems of germ-fighting, either through materials used or how buildings are laid out to minimize contact point/germy surfaces.	link
Small-scale solutions	Small scale technology solutions can be beneficial in both developing and developed contexts, improving urban communities' resilience to external stresses and strengthening community cohesion.	link
Smart buildings & homes	Home automation and smart homes, fueled by the growth of information, computing, and wireless technologies, is becoming more widespread especially in countries such as South Korea. Smart appliances such as the toilet that analyses one's urine are becoming more common. Consumer AI is enhancing products and services and enabling new ones.	link
Smart Everything	As people continue to gain online access and more devices connect up to faster networks, everything will be "smart" enabled. This will greatly increase as 5G networks are built.	link
Smart logistics	Logistics and distribution are getting smarter via information technology – such as IoT, RFID, GPS – which is facilitating just-in-time operations.	link
Smart logistics & Intelligent Transportation Systems	Logistics and distribution are getting smarter via information technology. This is improving efficiency and enabling just-in-time operations. Through the proliferation of technologies such as RFID and GPS, more items (people, devices, products) can be tracked and located.	link
Smart materials	Materials engineers are creating advanced materials that are: Smart--able to respond to environmental conditions and changes. Multifunctional--e.g., aircraft skins that can both absorb radar and change their shape depending on airflow. Adjustable to the environments in which they will be used--e.g., structural materials that strengthen during service, perhaps in response to temperature changes.	link

Tech-enabled activism	Information technologies are becoming more important to activism and protest, especially as use of the Internet and mobile phones continues to grow.	link
Truth increasingly blurry	The growing use of online sources makes it increasingly difficult to find "the truth," as sources interpret news and information to fit their worldview.	link
Virtual-real blending	The boundaries between the real and the virtual are becoming more porous, in areas from economics and consumer goods to media.	link
3D Printing	Additive manufacturing, often referred to as 3D printing is transitioning from a prototyping tool to a manufacturing tool. It has the potential to profoundly alter the manufacturing landscape by allowing not only manufacturers but individuals and small businesses to create custom products on demand. The primary applications of additive fabrication are design/modeling, fit and function prototyping, and direct part production.	link
AI	The global AI market is expected to reach \$734 billion by 2027, expanding at a CAGR of 42.2%, driven by big data, cloud-based applications, and demand for intelligent virtual assistants.	link
Augmented reality	Augmented reality (AR) systems supplement a user's real world with digitally created visual and aural information including text, graphics, 3D animation, and sounds, producing information streams that lie somewhere between reality and virtual reality.	link
Blockchain	The global blockchain market size is expected to grow from \$3.0 billion in 2020 to \$39.7 billion by 2025, at an impressive annual growth rate of 67.3% in wide range of process applications, e.g., supply chain management	link
Connectivity ubiquity	Constant connectivity is becoming the norm. This is creating new consumer demands on service providers, and new opportunities for organizations to stay in regular contact with their customers.	link
Digital media manipulation	Online media has shown itself vulnerable to bots, search engine manipulation, bias, and disinformation, highlighting the vulnerabilities of free speech in a digital age.	link
Government joins the cloud	The use of the cloud in government is steadily increasing, with the benefit of breaking down data silos and enabling future innovation.	link
Quantum computing	A quantum computer harnesses the phenomena of quantum mechanics to deliver huge leaps forward in processing power. Quantum machines promise to outstrip even the most capable of today's supercomputers.	link
Social media for health	The use of the web and social media to promote collaboration between patients, their caregivers, medical professionals, and other stakeholders in healthcare in order to achieve better health outcomes.	link
Wearable computing	After years of prototyping and development, and some successes in specialized environments, wearable computing may be poised for broader adoption. Entertainment, sports, and fitness uses will drive the consumer market; healthcare applications will expand; and military and industrial applications will continue.	link
Anti-bacterial design	More buildings and consumer products are being designed to reduce the spread of bacteria and microbes.	link

Economic Trends

Non-traditional food access	The bounty of new community-sourced and prepared meal solutions poses a huge challenge to traditional models.	link
Sharing/Collaboration economy	Some consumers are moving beyond the "access over ownership" idea made popular by companies like Zipcar and Netflix and experimenting with collaborative consumption.	link
Sharing as a sustainable choice	The knowledge economy is driving a move away from ownership of resources—including physical assets such as space and technology, people, and even IP—and toward greater sharing, such as with fractional ownership.	link
Subscription service business model	Online subscription meal-kit companies like Blue Apron, Hello Fresh and Chef'd have steadily popped up in recent years, just as retailers have angled for a piece of the business, from Amazon's Meal Kit launch to Albertson's acquisition of Plated.	link
Subscription service education model	Reconsidering the future of the university requires considering a number of options, but given the rise of the sharing economy, a subscription service might be a valid model.	link
Beyond the cash economy	Bartering and local currencies have come into vogue in some communities, and are being used by businesses and consumers.	link
Fractional ownership	Consumers are increasingly present-oriented, and are increasingly valuing the use of products over formal ownership. As a result, business models like fractional ownership, and expanded leasing are becoming increasingly common.	link
Experiential marketing	As products and services become commoditized, companies are adding value and distinction by marketing experiences rather than just products.	link
Collaboration communication platforms	Collaboration platforms such as Slack, Microsoft Teams and Zoom designed to mimic or promote more interactive virtual collaboration have been growing with more significant adoption catalyzed in 2020 during the COVID-19 pandemic.	link
Co-working collectives	Remote workers in many Western cities have begun to establish co-ops or collectives with other telecommuters to purchase private office space where they can combine the comforts of home with the efficiencies of a modern office.	link
Crowdsourced design	Organizations are experimenting with crowdsourced design.	link
Aging workforce	Labor force participation of workers 55-64, 64-74 and 75+ are continually growing with rates at younger ages declining or remaining steady.	link
Digital nomads	The number of digital nomads, workers who utilize information and communication technologies such as the internet, Wi-Fi, email, laptops, VPNs, smart phones, etc. to work in a mobile fashion from a myriad of different locations, are increasing.	link
Employee engagement	Companies are paying closer attention to increasing the emotional commitment of their employees through employee engagement programs.	link

Hotdesking	A term for shared workstations that aren't assigned to specific workers but are available to mobile or remote workers on an as-needed basis when they are working in the office.	link
Knowledge economy	The knowledge economy is focused on the essential importance of human capital in the 21st-century economy. The rapid expansion of knowledge and the increasing reliance on computerization, big data analytics, and automation are changing the economy of the developed world to one that is more dependent on intellectual capital and skills, and less dependent on the production process.	link
More flexible work schedules	Employees are asking for more flexible work hours, and employers are providing more flexible-hour opportunities. In the last five years, this trend has picked up more and is continuing the more Gen Z and millennials become a bigger portion of the workforce.	link
Remote workforce	Employers are offering remote work as an option for employees.	link
Talent shortage	Companies in North America, Europe, and Japan are finding it increasingly difficult to find workers with the required skills, education, and talent.	link
Third spaces	Remote workers are moving out of the home office to occupy a growing number of diverse locations from which they can telecommute in comfort, be it from the café, car, or co-working collective. Public spaces are becoming important work/play points for mobile consumers.	link
Working-at-home	Infotech-enabled home-based work is a growing trend in much of World 1, making it harder for people to draw clean lines between home and work life.	link
Virtual/Augmented space job opportunities	As virtual worlds and environments continue to expand, new opportunities for individuals and businesses to work in these spaces will emerge.	link
The need to transform our infrastructure	The world is changing, and collectively we are underprepared for many of the challenges ahead. The vision for the ideal future is a world where sustainable, resilient and inclusive infrastructure works for all people; this will not only achieve positive social and environmental outcomes but also has the potential to deliver long-term economic outcomes compared with the status quo.	link
Public financing of public education	Budget pressures: higher education is facing decline in public funding.	link
Rising healthcare costs	The increasing cost of healthcare, particularly for the elderly, is forcing consumers to make difficult choices to postpone care.	link
Fuel price volatility	Increased global demand for oil, political instability in oil-producing regions, and tight refinery capacity in the US have all contributed to rising fuel prices in the US. In addition, interest in small cars has surged since the spike in fuel prices following Hurricane Katrina. Continued volatility in fuel prices could cause growth of the small car segment to accelerate further in the US.	link
Income inequality	Real median U.S. household income was \$70,784 in 2021, statistically unchanged from the previous year, although income inequality increased for the first time since 2011, according to today's U.S. Census Bureau release of the Income in the United States: 2021 report.	link
Middle class shrinking in US	Some economists are worried that the U.S. middle class, loosely defined, is weakening due to falling wages, stagnant unemployment and declining benefits and social supports.	linklink

Environmental Trends

Alternative energy	Renewable energy sources include hydropower, wood biomass (used to generate heat and electricity), alternative biomass fuels (such as ethanol and biodiesel), waste, geothermal, wind, and solar. Solar power use is rising. Consumers are increasingly deciding to "go off the grid" using a mix of local power sources such as solar, wind, and micro hydro to power their homes. Homes using green technologies are being built at an increasing rate.	link
Building green buildings	Green building encompasses a structure's planning, design, construction, operations and end-of-life recycling or renewal, while considering energy, water, indoor environmental quality, materials selection and location. Green buildings and communities reduce landfill waste, enable alternative transportation use and encourage retention and creation of vegetated land areas and roofs. LEED rated buildings are increasing in number and types.	link
Climate change and health	Climate change is already placing the health and wellbeing of billions of people at increased risk. Mitigating these risks will require reframing climate change as an urgent public-health issue—and developing new products, services, and models of healthcare and disaster relief.	link
Climate change driving infectious diseases migration	Climate change is changing the course of infectious diseases worldwide.	link
Climate changes' disproportionate impact	Low-income communities already have higher rates of many health conditions, are more exposed to environmental hazards, and take longer to bounce back from natural disasters. Food and water costs are expected to continue to rise in the face of environmental floods, droughts, and disasters.	link
Deforestation	Deforestation continues with a rapid increase since 2020. These forests are vital as carbon sinks in regulating the global climate - their loss will drive climate change.	link
Global food production increases infectious diseases	Since 1940, agricultural drivers were associated with >25% of all — and >50% of zoonotic — infectious diseases that emerged in humans, proportions that will likely increase as agriculture expands and intensifies.	link
Greenwashing	As the demand for eco-friendly products and services grows, so too does the risk of companies overstating their sustainability credentials in order to attract and retain customers and investors. This phenomenon has been coined 'greenwashing' or the 'green sheen' and regulators are starting to take action.	link
Heat stress created by urbanization	Large cities, due to their vast build up areas, can disturb weather patterns, creating a microclimate called an urban heat island (UHI). UHIs can be 5-6 degrees warmer than the surrounding countryside, posing challenges to human health and city systems.	link
Indoor air quality	Indoor air quality is a growing concern.	link
Municipal environmentalism	Cities are creating their own local standards/regulations/codes for environmental sustainability.	link
Pressure on food supply	Food demand is expected to increase anywhere between 59% to 98% by 2050.	link
Product transparency	Consumers have increasing access to product information, enabling them to easily compare product features and pricing to find one to suit their needs and budget. Consumer interest in the environmental and social impact of the products they buy are placing pressure on producers and retailers to increase the transparency of their production and distribution processes.	link
Resource constraints	Significant uncertainty surrounds the question of whether or not the world will have enough of key resources like energy, water, biodiversity, and arable land in the coming decades. Resource shortages are increasingly viewed as sources of risk for armed conflict.	link

Sustainable cities	Cities are emerging as indispensable players in the struggle for global sustainability. They create and are strongly impacted by sustainability issues, but also have huge potential to help mitigate, adapt to, and solve issues related to sustainability.	link
Traffic congestion post-COVID	While billions of hours are lost annually due to traffic congestion, US Traffic congestion has decreased post-COVID.	link
Water scarcity	Water availability per person continues to fall in many countries and the availability of fresh water is expected to be a major issue in coming decades even in the US, where the availability of abundant safe water is taken for granted.	link
Water value rises	Water will increasingly be viewed by businesses and consumers as a strategic resource rather than an essentially free commodity.	link
Wireless electricity	Wireless transmission of electricity has been a dream for nearly a century, and finally certain types of wireless electricity transmission are poised for commercialization and for integration into a wide variety of products over the next decade.	link
Not building for the future	Architects and activists are teaming up to save old buildings to help save the climate. Tearing down an outdated building to build a new one results in a huge carbon footprint. Activists are pushing to refurbish outdated buildings instead.	link

Political Trends

Data governance	More than ever most people, organizations, and governments understand the need and have the desire to protect their PII in a digital environment, but the attacks keep coming. Federal governments have been relatively stagnant in regulation since around 2000, but states have begun implementing more stringent laws.	link
Declining trust in formal institutions	As seen in the political and religious institutions, more and more Americans have less trust in the formal institutions.	link
Digital security	Governments and private sectors continue to fail to protect citizens' personal data from data breaches. The public will continue to demand better protections and accountability from governments and the private sector.	link
Flexible/porous borders	The boundaries of national sovereignty are becoming more permeable.	link
Gross National Happiness	Governments are considering measures of happiness in addition to or instead of GDP as success criterion.	link
Immigration growing	Economics continues to drive international migration, as people in poorer countries seek to improve their prospects, and companies seek to increase the supply of lower cost labor.	link
Local more trusted	Polls indicate that local elected officials are the most trusted, followed by state, and then federal which is trusted the least.	link
Neo-protectionism	The Great Recession erodes some of the global consensus on free trade, with the potential to trigger global trade wars that could hamper international trade and impede economic recovery in affected countries.	link

Regulations localizing	Increasingly, local, not national, governments are making decisions regarding regulations, requirements, and clinical studies.	link
Rights of nature	A small growing movement to grant legal rights/protection to nature	link
Social tools becoming political tools	The private sector is creating hardware and software that is proving highly effective in enabling citizen action around the world.	link
Terrorism	The U.S. faces not just faces threats from foreign actors but also internal actors as well.	link
Visa denial	Stricter visas policies: more barriers for a college education and mobility in the US	link
Political transparency	Citizens have growing demands for accountability on the part of elected officials and public employees. Government agencies will need to adapt to evolving requirements to make internal work products, reports, budgets, and policy discussions available for public scrutiny,	link
Soft paternalism	There is growing interest in using regulations to "nudge" citizens towards better decision making. One approach that is easing the acceptance is food transparency and health.	link

APPENDIX 5. GLOSSARY

Scanning hit	an article, blog post, video or other piece of information describing or signaling a potential change
Trend	A statement describing a change and its future direction: increasing, decreasing, or holding steady
Driver	A thematic cluster of trends, scan hits, or other research information that describes an influential change; these are the fundamental building blocks of scenarios
Scenario	A plausible plot line or story of how combinations of uncertainties and drivers might play out in the future; the 2x2 approach produces four scenarios
Implication	A potential consequence for the organization if a particular scenario plays out
Issue	A strategic question emerging from the scenarios for the organization, typically based on clusters of related implications
Option	A proposed response by the organization to a strategic issue