
A Roadmap to Better Agency Planning:

*A Case Study in the Bureau of Indian Affairs,
Great Plains Regional Office Division of Facilities Pilot Project*

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Abstract

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In Spring of 2016, the Bureau of Indian Affairs (BIA), Great Plains Regional Office Division of Facilities (GPRO DoF) initiated a pilot project to develop a facilities master plan with an agency location. The intent was to prepare and experiment with long term planning to remedy the problem of severely deteriorated employee housing units that exists as a national issue with many BIA agency structures. The average age of housing for employees at the pilot project location was 72 years old, many with health hazards such as lead, asbestos, mold and radon issues to varying degrees of severity. The issues have been identified in a Department of the Interior, Inspector General Report that was made publicly available in September 2016, showing problems with communication, collaboration and maintenance as interconnected.

I was the volunteer intern Junior Program Analyst put in charge of the pilot project in June 2016, tasked with developing the planning document and the process that would create it. Through the three months I worked as a volunteer intern, I developed this new method in collaboration with the GPRO DoF, BIA local Agency, Bureau of Indian Education (BIE), and the local Office of Justice Services (OJS). The resulting process was a translation of a small town master planning process, shifting the perspective of the location from just an agency with staff and structures to be managed to that of a community comprised of local experts. This planning model based itself upon four key points;

- Communities are comprised of local experts that are more knowledgeable about their community strengths and weaknesses than others
- Collaboration and two-way communication strengthens all stakeholders and leads to long term improvements
- Community development and improvement increases employee retention
- The planning process develops long term planning that is aware of the abilities and limitations present in a community, and capital improvement plans are thus more effectively created to reflect what is reasonable for the unique situation present at that community.

The planning process developed through the pilot project has the potential to create long term improvements to agency locations and reconnect the various stakeholders through improved collaboration and communication, but it has its own limitations as well. The effort requires a full-time planner to develop and continually manage the plans, especially as new ones are developed and existing ones are implemented. It is critical to have this position, as the individual not only creates the plans but monitors the progress of plan alignment, maintains as the point of contact for stakeholders and facilitates the plan development and revision processes. Once established and each location has a plan, the development of a Regional Master Plan should be developed, providing an overview based on the community master plans and RO goals and assessments.

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Acronym Page

Bureau of Indian Affairs	BIA
Bureau of Indian Education	BIE
BIA Great Plains Regional Office	BIA GPRO
GPRO Division of Facilities	GPRO DOF
Capital Improvement Plan	CIP
Department of the Interior	DOI
Facilities Condition Index	FCI
Regional Office	RO
Office of Justice Services	OJS
Operations & Maintenance	O&M
Strengths Weaknesses Opportunities Threats Analysis	SWOT Analysis
U.S. Department of Housing and Urban Development	US HUD

Chapter 1: Introduction

Context

The Bureau of Indian Affairs (BIA) facilities program is undergoing a transition from regional programs being managed at the national central office (Formally known as the Office of Facilities Management & Construction), to the regional programs being managed through each individual Regional Director. National policy, oversight, direction, and project funding is provided by central office, which is now the Division of Facilities Management & Construction. The Regional programs manage their base budgets which come direct from Headquarters in D.C., the Operations & Maintenance (O & M) programs some of which includes developing short and long-term strategic planning; training & development; project funding requests; maintaining the corporate database & asset management; as well as minor design, construction, improvements and, repairs. This change comes as BIA and the Department of the Interior (DOI) acknowledge multiple issues in management and maintenance of existing facilities (Langley 2016) (Office of Inspector General 2016), leading the Great Plains Regional Office (GPRO) to initiate a pilot project to explore the development of a new long term planning model.

During the summer of 2016, I worked as a volunteer intern junior program analyst at the (BIA), GPRO Division of Facilities (DoF). The job description was to develop a facilities master plan as part of a pilot project to experiment with improving and planning for the local agencies that the GPRO DoF. Many locations suffer from severely deteriorated employee housing, lack of funding to adequately maintain them, and a dearth of staffing that cripples their abilities to successfully meet their organizational goals and objectives. The GPRO DoF identified that a new model was necessary to change these issues, as the existing model was not producing positive outcomes. Many of these issues were recently supported and identified in a Department of the Interior, Inspector General Report (Office of Inspector General 2016) that determined many of the schools under the Bureau of Indian Education were in severely deteriorated conditions, some of which posed serious health and safety concerns. The report attributed the issues to communication, collaboration and technical limitations. The pilot project was intended to see if a master plan could map out how to address these issues and correct them.

To fulfill this objective, the development of the framework was largely left to me, the intern, to determine, provided it contained a twenty-year Capital Improvement Plan (CIP), the expected

costs to implement this plan, and the methods to meet this CIP. The document and process that was the product of the pilot project were created through a collaborative process that dynamically changes the perception of local agencies, recognizing that these are communities in need of a Small-Town Master Plan, instead of a facilities plan. While simple in discussion, the transition carries larger shifts in process and organizational approach to agency locations and their stakeholders, one that promotes collaboration and communication as the leading tools to understanding and resolving the challenges these locations face.

Purpose of this Thesis

The intent of this thesis is three-fold;

- To present as an active-participant case study, the events of the pilot project through narrative description;
- to evaluate the pilot project process and materials utilizing literature, a Strengths, Weaknesses, Opportunities, & Threats (SWOT) analysis and detailed critique of the draft document;
- and to outline a roadmap that guides and advises on the process of developing a master plan for other agency locations.

The results of this research are intended to show that there is the potential for improvement in collaboration, communication and achievement of organizational goals by utilizing the master planning process, as outlined in chapter five.

The information presented within the document focuses on qualitative data and supporting literary information to create the logical arguments defending the value presented to BIA by the proposed planning model. There are also supportive statements documented from federal employees who participated in the pilot project process, these provide support for identifying strengths, weaknesses, opportunities, and threats to the master plan process, as well as justification for its continued use.

Chapter 2: BIA Agency Master Plan Pilot Project

The Situation

The Bureau of Indian Affairs maintains housing rentals, referred to as quarters, as rental options for federal employees and families, offering housing options in locations where there is a limited market or remote locations. Some locations do not need very many quarters, while others rely upon it for their employee housing options. These quarters face similar challenges of other public housing opportunities managed by the government, presenting challenges to balancing affordability, maintenance condition and services, but also have a critical impact on retention for many remote agencies. This can impact not just BIA services, but BIE and police forces offered by the Office of Justice Services(OJS) as well. In an interview with one federal employee, they noted that housing is their major cause for retention problems.

In Spring of 2016 the BIA, Great Plains Regional Office initiated a pilot project to develop a Facilities Master Plan for their housing units, also referred to as Quarters. This plan was to be developed for the local level of BIA offices, the agency locations. To implement this, the Division of Facilities reached out to the Superintendents in charge of the BIA agencies, asking for a volunteer agency to participate in the pilot project.

To keep the project moving forward, the GPRO Division of Facilities took on a volunteer intern position for the summer, bringing me onto the team under the Deputy Director. I was informed that I would oversee moving the pilot project forward, with assistance from Facilities, but ultimately the project fell to me to fully develop and organize. The task included contacting the various stakeholders, creating a master plan that projected a twenty-year improvement plan for the buildings, accurately described the situation at the agency including building assessment, relevant policies and anything else deemed important to the success of the plan. The volunteer intern position was eleven weeks in which to produce a viable draft master plan.

Preliminary Research

From the first day, it became critical to begin to understand the policies that affected quarters management as well as sifting through the data on building condition, maintenance costs, replacement costs, and maps of the location. I was given a printed map from the 1990's of the

site, the most recent available site map, a stack of policy handbooks, and printed spreadsheets detailing housing maintenance items and conditions.

Policies for management of quarters are spread across multiple books depending on the type of information needed, and I needed to understand what was required by policy if this plan was to succeed. What types of priority work is there? How do you document these needs? What types of inspections? These are just a very small collection of the questions that the policy handbooks answer, but they are intimidating piles of paper to leaf through. The policies have another layer of complexity due to BIA's government-to-government work with the Tribal Governments in managing the land that is held in trust for them. There are also policies that give Tribal Governments Right of First Refusal on project construction/demolition and transfer of property. Every day carefully looking over the policies, copying and documenting the relevant ones, all with the intent to master their secrets. As time went on stakeholders began to understand I had generated a near encyclopedic knowledge of quarters management policies, providing a resource to them that helped clarify issues relating to the quarters. This facilitated increased communication and trust between the intern and the stakeholders, as the approach taken was always friendly conversation aimed at helping clarify what I understood the policies to be.

Knowing the policies, I began to understand the relationship that exists between the buildings, conditions, maintenance needs and the database that tracks these pieces. If a quarters unit needs maintenance work, such as damage to a door, window, interior, etc., then the local agency submits the item into the database with a cost estimate of the need and the building number. This information becomes acknowledged and the process can begin; The project scope is developed and submitted for the appropriate funding source (multiple exist and are dependent upon the project amount, work required and type of improvements). Funding comes down from the national level for items, which is handled by the regional office and the agency depending upon the level of work required and who to hire to conduct the work or manage the contracted company.

But another critical relationship was revealed in the data and in the policies; the Facility Condition Index, or FCI. This is the unit of measurement that determines if a building is good,

fair or poor by taking the estimated replacement cost of a building and dividing it by the cost of all maintenance items for that building. The scale itself was straightforward enough;

- 0%-5% = Good Condition
- 5%-10% = Fair Condition
- 10%-30% = Poor Condition
- 30% and over = Critical Conditions (Interior 2010)

However, the FCI is not a reliable metric for measuring building condition. As acknowledged by a report from the Department of Interior Inspector General (Office of Inspector General 2016), the FCI can appear better than the building condition truly represents due to a variety of reasons, typically associated with incomplete data. If maintenance issues are not entered into the database, then the condition will show better a better rating. Also, if the replacement cost, determined by a national inspection contract, is unrealistically high, then the condition can appear better than existing conditions demonstrate. To demonstrate these issues, take a hypothetical example of a small, single story house has a replacement cost of \$350,000, and has a handful of documented issues; roof needs repairs, interior sheetrock has water damage in a bathroom, and two exterior windows are damaged and need to be replaced. For this list let us assume these cost an estimated \$45,000. This would represent a FCI of 12.8%, identified as a poor condition by the FCI scale. But for a variety of reasons other issues have not been submitted to the database; a section of ceiling in the kitchen has begun to sag due to water damage entering through the roof that needs repairs, and mold is now present. Say these add another \$50,000 worth of maintenance needs, but since they have gone undocumented in the database, not only can the funding not be received to fix them, but the condition of the building is false and does not convey the urgency of need for maintenance funding. The true FCI of the building should be 27%, or near critical condition. But what if all the maintenance issues were documented, but the replacement cost for this small, single story house was artificially high in the database? What if the database replacement cost, which is determined by a national contracted inspector, was determined to be \$520,000? Now while the information of what the needed work is accurate, but the FCI is 18%. This number is used to measure the building conditions without having to delve deep into the full maintenance list and to determine national funding. If it is skewed by either a

lack of maintenance entries or by unrealistic replacement costs, then funding cannot be appropriately allocated to meet the true existing needs of the communities. Looking at the database alone, I could not tell that these issues were present. It wouldn't be until traveling to the community and given a tour of some of the houses that the disconnect between the data and the real world would become visible.

While the GPRO DoF did not have GIS tools available to spatially assess the data, there were site maps available. Copying a full-sized site map, data of conditions and maintenance needs were color coordinated per building unit to visually represent the existing conditions, providing a tool that could be shared in future meetings, which would raise further questions as to the true conditions of the buildings. After the first meeting and tour, it quickly became apparent that the data entered was incomplete, or where it was complete the FCI was skewed by unusually high replacement costs. Using an RSMeans Square Foot Cost Handbook, I quickly developed an Excel tool that allowed me to test assumptions of housing unit replacement cost. Most of these units were single family ranch houses, roughly 1,100-1,600 sq ft. These units were estimated in the database to have replacement costs more than half a million dollars per unit in most cases, not factoring in demolition and remediation costs. Comparing against my square foot tool, I found the replacement cost to be significantly lower, but also reflecting a stark increase in the FCI number, revealing just how dire the situation was for many of these units. Layering with trace paper I began to create scenario maps that attempted to reflect true FCI assessments, demonstrating that most units were in the red, or Poor condition, with multiple pushed into the Critical range.

[The Plan Begins to Take Shape](#)

With this data in hand and a preliminary understanding of policies I was given a link to a US Forest Service website that had detailed how to develop a Facilities Master Plan. This tool was useful, and provided a starting point for understanding what was needed, but something seemed missing. The US Forest Service documentation for Facility Master Planning provide a template of what to include; management direction, influences, considerations, workforce analysis, inventory list and recommendations (MTDC Facilities Toolbox - Facilities Master Plan n.d.). While these are important to acknowledge (and some of these were indeed utilized in the final

plan), the overall design of the plan treats a location as a collection of buildings and staff that need to be documented and reported on by a planning committee. This sterile, precision method, while excellent for tracking quantifiable issues, was less a master plan and more a capital improvement plan.

This pilot project was intended to develop a master plan, but the definition of that was left up to me as the lead on the project. Instead of a capital improvement plan like the US Forest Service website described, I decided to gamble on a different approach. If this was a master plan, then I would treat it like a city or small town master plan, acknowledging that various stakeholders existed who should have a say in the shaping of the document. These agencies are more than a collection of buildings staffed by BIA, BIE or OJS; this is a community of employees in which communication, collaboration and conditions directly impact the attitude for those living and working there. To develop this, the first section would contain critical themes as identified by the stakeholders. These themes were intended to provide guiding framework for the future identity and improvements to the community, much like a master plan for a city outlines what is important to the residents.

Communication & Collaboration

One of the most critical aspects of the plan involved meeting with the stakeholders at the agency location. While email and phone calls were used initially to ask some questions and introduce myself, it was important to travel and meet with the agency administration and facilities management team, as well as the other stakeholders of BIE and OJS that also utilized the facilities.

Our initial meeting was with the BIA agency administration as an opportunity for me to introduce myself, explain my initial plans and research for developing a master plan and how I wanted the process to continue. Understandably, the tone from the agency was cautious; they explained it wasn't the first time someone had come offering to fix all their problems. As part of the meeting the Facility Manager gave us a tour of currently vacant units, showing us that despite being listed as "fair Condition" in the database, there was a disparity. The true condition revealed multiple issues that prevented the condition from being livable, ranging from deteriorated roof,

walls, ceiling, as well as damaged floors, lead and asbestos issues. Discussion with stakeholders revealed that staffing and funding limitations made it difficult to keep up with the needs of the dozens of units, most of which had been built in the 1930's.

As these communications with the stakeholders continued I discovered that the limited, and poor condition, housing rental stock in the past had been constantly fought for between the stakeholders to meet their own employee needs, and yet all the stakeholders were attempting to achieve the same goal; Support and provide for employees. With the remoteness of the location, there was very little housing opportunity, either requiring a long commute to and from work, or a long commute out of the community for supplies. With many of the units managed by BIA local agency, tension was apparent when discussion of housing distribution came up between the stakeholders. OJS was running at about fifty percent staffing, and had attempted to hire new officers, but housing had been a deciding factor that prevented people from working there. BIA local agency and the employees of BIE were facing a similar situation as well. It became clear that there needed to be a detailed assessment of the total community housing needs, as the current methods were not adequate. The employee positions needed were typically filled by people beginning their careers, and were unlikely to have a full family, but may have a spouse or significant other who lived with them. We discussed housing option types, replacement units and expected employee needs and the typical composition. Eventually we settled on a proposed development of a single floor apartment style unit that would contain roughly seven to ten units of one and two bedroom units, with a priority on one bedroom units.

As I continued to meet with the stakeholders I learned that remoteness, building conditions, cost of rentals, and fuel tank heaters created a disincentive for employees. In multiple cases while I was there, a stakeholder reported incidents where new hires failed to show for their first day, choosing instead to seek employment elsewhere, where housing conditions were not only more varied, but improved conditions and reduced cost of living. The stakeholder groups were hard pressed to compete for new employees on the job market when people could take a job in a larger community for the same or higher pay and find housing that is affordable and does not contain health or safety hazards. The units available were not enough, and the conditions of some kept them from ever being occupied. Until these issues were remedied through additional

funding for improvements, renovations and replacement units, the stakeholders would continue to struggle to retain employees.

Identifying the Improvement Plan

Having met with the stakeholders on three separate occasions, as well as numerous phone calls and emails, the plan began to take shape. But the question was how to prioritize improvements? There were policies that helped focus this within the management handbook, requiring priority for buildings that were critical FCI rating, maintenance issues that were health and safety hazards, and environmental hazard mitigation. But the issue presented was that many of these housing units suffered from at least one of these priority issues. Multiple housing units were vacant due to severe health and safety issues such as damaged floors, interior water damage making ceilings collapse, mold issues, asbestos, lead paint and high lead soil contamination. Where to even begin prioritizing housing units?

The answer arrived during a meeting with the community stakeholders one day, and everything in the CIP followed like an avalanche. BIA Agency staff revealed that about thirty or forty years past, one of the main street sections was once the collection of houses that everyone wanted to be in. The units were modest but in pristine condition, with well-maintained lawns and houses, a joint effort by the employees living in the units and the BIA Agency Facilities staff. This street was the pride of the community, but as the units began to suffer from neglect and deteriorate the community pride was diminished as well. Many people of the community remembered how this used to be. We realized that this could be the lightning rod we could use to jump start that sense of community pride and commitment. The street contained seventeen houses, with three that were vacant due to unsafe conditions. DOI policy stated that any work that required the tenant of the unit to vacate for prolonged time would require BIA GPRO or the agency to make equitable housing arrangements for them and any family living with them (Interior 2010). By prioritizing the vacant units first, we could rotate employees living in the other houses into the new ones when construction began on their current units, providing not only a housing solution for them, but also showcasing what the improvements will do for the community sooner. This rotation would generate increased buy-in from the stakeholders as well as raise the community pride and motivation.

With these improvements planned in the first quarter, the process became straightforward enough, the housing units would be improved in groups based on their street, and each grouping would take about five years, one quarter of the CIP plan. This method would restore the street that carried significance for the community as a demonstration of what all the units will look like and be maintained at, providing incentive for all stakeholders.

Plans and Action

Armed with the four themes of Affordability Communication, Community, and Retention, and joint discussions on envisioning what the community would look like in twenty years, I set out to detail how this could be accomplished. From the meetings and discussions, I understood that the staffing and funding shortcomings would present a barrier that could not be readily overcome, so I needed to find a strategy that could facilitate improvements without creating a large additional workload for the stakeholders. To accomplish this I identified the primary issues that had the opportunity to be more readily addressed;

- Lack of communication and collaboration
- Complex, unclear, and/or outdated policies
- Stagnate projects
- Lack of long term plan for improvement of quarters

While in the past there may have been communication & collaboration barriers, the planning process had changed that already. The GPRO DoF was hearing regularly from the stakeholders, showing interest in not only the plan but continuing to stay in communication with the GPRO on projects, questions and issues that arose. In order to maintain and preserve the new dialogue, we identified three types of new collaboration meetings that would be implemented and put into the master plan methods;

- Annual Assessment Meeting

Intended to be a region wide meeting at the GPRO, the facility managers from all agencies would gather together every spring to discuss with the GPRO DoF the existing conditions, projects, concerns, staffing, funding, program management, technical training, and other priority items. The intent is to increase understanding

and discussion among all agencies the conditions, need and why certain projects may be prioritized over others due to urgency issues. This provides accountability to the stakeholders involved and encourages sharing of information and discussion of solutions between all facility managers and the RO.

- **Deferred Maintenance/Backlog Database Entry**

With the database information being critical, and a choke point, for receiving funding, an annual time in early summer where either virtually or physically a specialist from the RO would offer support meetings to provide guidance and technical assistance to the employees responsible for data entry.

- **Project Preparation Meeting**

Held in early to mid-August, these annual meetings are for the Division of Facilities in the RO. Using the information generated from the previous sets of meetings and other relevant data such as a master plan CIP, the RO Division of Facilities can prepare and budget projects for the upcoming year.

Participant Confirmation

As the draft came together it contained almost two hundred pages of information, of which only about forty were written context and information. The document contained a sizable appendix covering a large list of materials that were relevant to comprehensive understanding of the community: semi-detailed building report with pictures, a section on floorplans, maintenance items spreadsheets, quick grab documents needed for certain policies/procedures, and listing sources for data, information and policy quotations. The draft went through seven major revisions, utilizing feedback from the GPRO DoF staff and Chief as well as comments from the community stakeholders.

To generate feedback and support, the draft was shared with the stakeholders electronically and we asked for feedback on the content and the structure of the document ahead of a final meeting in which we would have an open discussion on the future of our collective work. This proved critical, as it allowed the stakeholders to see the most recent version and provide input before,

during and after the meeting as to the context and content of the plan. In the final meeting, I presented to the assembled stakeholders with copies of the draft document and gave a short presentation highlighting what we, the assembled stakeholders, had accomplished and what it would mean. To my surprise, the stakeholders were thrilled with the results. The plan was a success and accurately assessed the situation their community faced, and provided a reasonable CIP for future improvements over twenty years. More importantly, they had played a role in the creation of the document, generating buy in, trust and open communication, all of which was necessary to see the master plan to success.

An Iterative Process

The process had opened channels of communication between all of us as we worked through the effort to better understand what the community needed to meet our needs and policy requirements successfully. The themes we had identified served to focus our direction and keep in mind that all stakeholders here were looking for the same thing; to retain employees and accomplish their work. This could not be done alone, and we had a plan now that identified how the stakeholders would stay in touch and work together to improve the physical space through collaboration and open communication.

But I stressed that this process is not over; master planning is an iterative process and never truly stops. Just as we identified how to communicate more effectively and openly, we needed to continue to do this when evaluating the master plan in the future. Each year the master plan would be used to clarify what projects had been identified to be priorities, with exceptions for emergency projects. Every five years the plan would be reevaluated to determine if the themes and methods still fit with the community needs and vision. Plans are created and exist in both an a-political and political climate, and to survive changes of leadership and administration the channels of communication must be kept open and aimed at how each stakeholder can lift the community, and not just their organization, up collectively for the betterment of all.

As a final testament to this model providing a change in the right direction, it was revealed that we had projected the cost to do the work for the first quarter of the plan; improving and/or replacing seventeen housing units over five years, including the mitigation of environmental

hazards such as lead, asbestos, mold and radon concerns. This cost analysis was submitted for review of funding. We announced that the funding had been awarded for the start of the new fiscal year, allowing the pilot project to transition from document and discussion into action.

Chapter 3: Literature Review

In developing both the process and the plan there were four common threads utilized to weave together the narrative and framework; The importance of master planning, collaboration between all stakeholders, agencies as communities, and the shared goal of employee retention. Each thread is discussed below, citing relevant bodies of work that provide the basis for discussion in the next chapter.

Master Plan

Long term planning is pervasive in all forms of government, with development of master plans being common discussion for local governments on the management and visioning of their communities. As noted by the Small Town Planning Handbook (Thomas L. Daniels 2007), planning is something everyone does to better organize and make decisions in their lives, whether this is an individual planning their week, a business identifying their trajectory, or a government making plans for the desired direction of a community.

The essence of creating mater plans is that those affected by it are drawn together to discuss, evaluate and plan a long-term course of action that best meets the needs of the community (Thomas L. Daniels 2007). Governments use master plans as roadmaps to future improvements and projects, as well as snapshots of the community's existing conditions. Through this plan, the government seeks to manage and guide the physical structure to better serve and meet the needs of the community. This is not a process for those seeking a quick fix. Developing a plan is intended to capture the current situation, both the good and the bad, and take that knowledge and apply a collection of vision, mission, goals and intents, grounded in the knowledge of those within the communities and backed by expert feedback for options and opportunities. In this line of thought, a plan should develop as comprehensive of goals and objectives for the entire community.

The master plan is the physical embodiment, representing the final agreement between stakeholders, but this is simply one piece of the puzzle. The creation of a plan also creates the process, which continues after the plan has been drafted and approved. The Planning Process represents the continued communication between those who created it as well as the stakeholders

that are directly impacted by the plan. Without this continued process, a plan becomes meaningless.

Collaboration

Teamwork and trust are built upon the back of successful collaboration, whether between a team of employees, different departments or various stakeholders seeking consensus on an agreement. This process of working together through dialogue and the sharing of information, time and resources is well documented as a tool for teambuilding, organizational resiliency and adaptability (Damon Taylor 2015) (Emma Karanges 2015) (Grissom 2012) (Kevin Ruck 2012) (Izard-Carroll 2016). In interviews, the collaboration proved to be critical to what made the pilot project so successful, as it changed how to interact with the communities.

Within these agencies are the employees who work closest to the street level, working directly in contact with those that BIA, BIE, OJS or any other federal department looks to serve. The employees at the agency level are the street-level bureaucrats (Lipsky 2010), who have direct interaction, impact and discretion in enacting policy. As Lipsky notes, street-level bureaucrats are viewed as a tool or resource to utilize and apply and work closest to the situation or community in delivering a service. But often these employees can be at odds with policy, change or management if the vision and goals are not clear on how they align with their own work and impact for the people they serve. This can lead to decrease in engagement, participation or even result in resistance or stagnation, a choice to do nothing, and thus preserve status quo, to avoid the undesired, or misunderstood, change (Grissom 2012).

Collaboration builds trust, consensus and satisfaction for employees. Emma Kranges et al (Emma Karanges 2015), developed a model of engagement and communication that centered around six spokes of an engagement wheel;

- Strategy, Goals & values
- Support
- Identification
- Role
- Performance

- Voice

These parts define the focus that give employees a sense of involvement and satisfaction that their voice is being heard by management and that they are confident in the information of their role, performance and organization values. With these Kranges draws the conclusion that improvement in employee engagement and understanding can have significant impact on satisfaction, participation and work, by following the argument that work and engagement are directly influenced by communication at all levels.

Community

Community generates a sense of place, the connection and uniqueness of a location that generates pride and attachment. This is represented both in the physical space and the shared experiences of those who live and work there, in the values and goals set forth. This may sound like a city, a town or neighborhood, but it is not just a physical location. The three definitions for community in the Merriam-Webster dictionary are;

1. A unified body of individuals
2. Society at large
3. Joint ownership or participation (Merriam-Webster, Community Definition 2017)

In all three definitions, the concept of community is not strictly tied to a location, but a group of people. This idea, that community is defined by the people, will be linked to a proposed shift in how Agency Locations are perceived by BIA, shifting focus from a collection of facilities and employees to that of a community of individuals who share similar goals, knowledge and experiences that can enhance and bind them together. In interviewing federal employees who participated in the process, there was acknowledgement that the shift improved morale and generated additional support from the community.

As stated above, community is a collection of people who share values, goals and experiences. Typically, a community is made up of neighbors, friends, and family interacting and sharing their lives together. These agency locations, and the stakeholders that work there, follow this same pattern of community identity. It is important that in developing and planning for the community that all the stakeholders be given a participatory opportunity in the process to accurately reflect the vision and values of those who live and work there (Thomas L. Daniels

2007). These people are experts on their own community, closer to the issues than any other and bring a collection of information and perspectives to the table that otherwise would be overlooked, a potentially disastrous situation that may result in the oversight of an important piece of information that impacts planning decisions for the community.

Sense of place, and the concept of community, can be directly enhanced, or detracted from, by the condition of the physical environment. The U.S. Department of Housing and Urban Development (HUD) recognizes the importance of community and the built environment, stating;

Community development activities build stronger and more resilient communities through an ongoing process of identifying and addressing needs, assets, and priority investments. Community development activities may support infrastructure, economic development projects, installation of public facilities, community centers, housing rehabilitation, public services, clearance/acquisition, microenterprise assistance, code enforcement, homeowner assistance and many other identified needs. Federal support for community development encourages systematic and sustained action by State, and local governments. (HUD.gov Community Development n.d.)

Building conditions, public spaces, sense of safety and perceived support networks all can improve community, and in the process, improve unity and resiliency of employees in the face of various problems, and even improve communication and collaboration through a sense of familiarity, solidarity and/or trust (HUD.gov Community Development n.d.) (Monica Colombo 2001). If employees must worry about their needs and safety in the physical environment, then the community is negatively impacted. This can be seen taking shape in situations where the negative aspects of the environment, (such as severely deteriorated housing or lack of reliable heating fuel source) the members of the community will focus first on their own personal needs, and the network of support and identity becomes weakened.

Retention

Affected by various factors that have different levels of success based on the organization, retention continues to be discussed and evaluated by organizations and academics. Public sector employees follow a different tune typically for retention, as they are guided by concepts, beliefs

or convictions that motivated them to work in government, and typically this is not financial motivation (James L. Perry 1990). This requires understanding what employee needs are as well as defining what barriers exist to employee retention. In the case study, it became apparent that housing conditions, and availability, in these locations played a huge factor in whether employees would even clock in for their first day. This creates a link between the concepts discussed in the previous sections of this chapter to clarify that the community, its wellbeing, inclusiveness in participation, and its physical environment are all critical components of retention of employees, especially within the context of the case study.

Retention remains a primary focus for many levels of government, as it directly impacts the ability to meet the needs of those served by employees of the government, whether through direct or indirect means. In the case study retention was more than a common theme among the stakeholders, it was a major concern. Each of the stakeholders involved in the process were working with severely reduced employees compared to what was determined as necessary to fulfill their duties. OJS, admitted to operating at roughly half of the necessary police force, requiring them to maximize the hours worked by all employees, usually 10-12 hour shifts. Retention in government is unique, as it is most often driven not by financial or progression reasons, but out of a sense to serve the public or a specific group. Perry & Wise (James L. Perry 1990) noted that this motivation could be broken down between interest in policy formation, service to public or government, and strong belief in a program or cause. With this comes a risk for retention, as motivation to perform and remain at a government job are not likely to be heavily influenced by traditional incentives. Instead the situation must be assessed to determine what is most effective for the retention of employees. In the case study example, housing, existing conditions and lack of communication all negatively impacted employee retention, in multiple cases resulting in newly hired employees failing to show for their first day of work, choosing instead to seek better employment opportunities elsewhere that still fulfill their motivational factor for government work.

Retention is also affected by the level of communication and participation facilitated between employees, managers, and differing agencies/departments. A range of research (Grissom 2012) (James L. Perry 1990) (David Pitts 2011) has shown that increased participation and

empowerment of employees within the public sector can increase retention. When participation is effective between stakeholders, employees or departments, it gives credibility, legitimacy and accountability. This directly improves morale and informs the stakeholders that their knowledge, expertise, experience, etc. is valuable, and they are valuable as well. This generates not only the benefits of improved communication, participation and accountability (Kirkman and Rosen 1999), but also improvement in job satisfaction and translate into commitment to their work and employment (David Pitts 2011) (Izard-Carroll 2016) (Guthrie 2001).

The geographic and sense of place will also have a serious impact on employee retention. As described above, the concept of a community providing a sense of place for employees provides a grounding effect and generates stability and a support network much like a small town would. As such the approach must be to treat these locations as communities, acknowledging that, much like collaboration, they have the expertise and familiarity with the strengths and weaknesses of their community. If the community is struggling it is more reasonable to go and meet with those from the community to determine what the issues are than to generate assumptions and decisions from outside observation.

Chapter 4: Pilot Project Planning Model Analysis

The objective of the pilot project was to explore a different style of master planning, not moving away from infrastructure management planning but enhancing it dynamically for wider improvements, both in the physical conditions and the work environment. In deciding to mimic the basic style of a city master plan, some aspects needed to be shifted to fit the different demands and restrictions a federal branch has than that of a local government.

Whereas a local government can set zoning laws and protect the vested interest of the public through the police power of the city, a federal agency cannot engage in actions that encourage or discourage land use styles, but is guided by policies set at the national level for land that is governed by a sovereign nation and managed at a government-to-government level.

In the case study the land is held in trust by the federal government for the tribal government, and the housing units managed by GPRO DoF are intended for federal employees serving that community. This is not how most cities function, which typically develop regulations that help guide private development, create zoning laws and manage utilities, but do not own the structures, except in some cases of utilities and public housing.

To implement the planning process, a collection of assumptions was made to strengthen and quantify the plan and the process;

- Agency locations and the various stakeholders living and working there (BIA, BIE, OJS, etc.) make up a single community. These people, employees, community members are experts on the situation that exists, both good and bad, within their community.
- To improve, all stakeholders must discuss and document what does and doesn't work, and what their limitations are on accomplishing certain tasks
- A master plan is more than a wish list, and as such requires direct and continual participation from all stakeholders to create a comprehensive map to achieve and maintain the improvements.

These assumptions were drawn from the above literature, and then translated to apply effectively to the BIA methods and assumptions. Typically, the planning process would follow the creation of a Facilities Master Plan, similar to the directions outlined by the USDA-Forest Service (USFS) website toolbox. This method was developed with the USFS and the Missoula Technology and Development College, unifying USFS policy and technical assessment of locations, facilities and staffing. This model provides an excellent snapshot of conditions and creates a list of recommendations, but does not create concrete metrics and benchmarks required in the planning process created through the pilot project.

The Master Planning Framework

Utilizing the list of assumptions, the literature, and the information generated from the USFS Toolbox on facility master planning, I put forth the framework that was developed through the pilot project. This can be divided up into three threads woven together, and without one the integrity of the cable is compromised; the document, the community and collaboration. Without discussion and utilization of each, the planning process as implemented in Summer 2016 could not have succeeded.

The document represents the most visible thread of the plan, and was composed of seven sections:

1. The introduction
2. The critical themes
3. The methods used to succeed
4. The twenty-year Capital Improvement Plan
5. A list of relevant Policies
6. A discussion of location resources, including staffing
7. A location description with inventory

The second thread, community, follows the assumptions discussed earlier; that the stakeholders compose the community and represents the location as a multifaceted area instead of a collection of facilities that the agency, RO or national authority is responsible for maintaining. When discussing viewing agencies and locations as communities, this is a bundling of the community

of employees across all stakeholders, the built environment and the impact that these have on future employee retention. By creating a shift in perception of what the location represents, the understanding of the location shifts to recognize the local expertise, as well as the impact that these decisions will have on the future stability of the community. In the plan this was acknowledged through discussion of what themes were of importance to the community, as well as through the collaboration and discussion on existing issues and what opportunities existed to solve or remediate them.

The final thread that makes up the planning process, is collaboration, and it exists below and above the others. Collaboration with the community, understanding that everyone brings their own knowledge and expertise to the table, and that we all seek similar goals as federal organizations. In meeting with the stakeholders, the community members, I actively encouraged discussion of what the issues were, acknowledging that their familiarity and knowledge of the community surpassed what the RO knew. Without this inside knowledge and collaboration and support, there was little chance that the planning process could succeed. More importantly, it reconnected the communication lines between all the stakeholders of the community, including the RO. This improvement in communication and collaboration is enhanced by long term annual meetings that were discussed by all involved in the process and documented in the drafted master plan.

These threads, while imperfect in their first implementation through the pilot project, proved strong and flexible, creating a document that reads closer to a community master plan, a combination of quantitative analysis and qualitative information distilled into a document and process that continues to encourage honest and frequent communication.

SWOT Analysis

A SWOT analysis provides a framework by which to analyze the Strengths, Weaknesses, Opportunities, and Threats for an organization, a project, a policy, etc. It is composed of four sections, which can be combined into two groupings; Internal and External.

Internal contains the Strengths and Weaknesses portion of the SWOT analysis. These focus on factors purely measured and controllable within the scope of the project, organization, policy, etc. External, containing Opportunities and Threats, seeks to identify the factors that exist outside direct control of the topic being evaluated, so as to measure and increase awareness of these influences and what their impact is.

A SWOT analysis was conducted upon the pilot project, with intent to underscore critical points to the future success of the planning process that was created. Table 1 provides the breakdown of the SWOT analysis, and is accompanied by a detailed discussion of these four sections.

	STRENGTHS	WEAKNESSES
Internal	<ul style="list-style-type: none"> • Fosters collaboration and discussion of the existing situation, generating trust and clarification of roles & duties expected/required of all stakeholders • Clearly measures and identifies existing conditions and what is negatively or positively impacting the community's abilities • Generates a long term, twenty-year plan for improving the conditions within program authorities and provides benchmarks & metrics to assess progress 	<ul style="list-style-type: none"> • Long term success of the planning process is dependent upon continual strong, engaged, communication and collaboration. Neglect by stakeholders, especially the RO could eliminate the planning process' effectiveness • The engagement, communication, and development of drafting documents requires enough work for at least one dedicated FTE familiar with community master planning methods, especially if intending to manage plans for all agencies across an entire region.
	OPPORTUNITIES	THREATS
External	<ul style="list-style-type: none"> • Strong documentation of needs and conditions, especially in database entry, can significantly increase funding for projects • Documented staffing shortfalls and their impact upon abilities to meet community needs can increase support for additional position funding. 	<ul style="list-style-type: none"> • Shifts in nationally allocated funding to DOI and BIA could severely reduce ability to meet projected timeline of improvements • Emergency situations outside control of stakeholders could interrupt the _ implementation methods intended to streamline and simplify some processes

Table 1

Strengths

The planning model developed through the pilot project focuses on improvement of communication as a primary goal by requiring detailed discussions, meetings and collaborations in creation of the master plan document. To optimize the success rate for the master plan,

communication is required to be open dialogue aimed at all parties involved reaching an understanding of the current situation, the policies, and what roles each stakeholder must fulfill. In holding these meetings and steering clear of authoritative management during the meetings, the process will lead to an increased willingness to communicate issues stakeholders face and open discussion for resolutions and compromise.

This process also sets out to realistically, and openly measure the strengths and limitations present within the community; building conditions, employee positions (filled and vacant), budget, position roles, etc. By collectively discussing and documenting all strengths and limitations within a master plan, the stakeholders increase their awareness of existing resources, limitations and tools available to them. This increased awareness and documentation representing the most accurate picture of the community provides baseline knowledge for developing improvement strategies and defending requests for additional funds. It provides documentation showing what the current situation is within the community, and that these issues were identified by the collective stakeholders involved in the planning process.

Lastly, the use of the planning model takes the feedback and the increased shared understanding and documentation to build a long-term improvement plan. By utilizing the knowledge of the community and the current conditions, a plan over the course of twenty years can be carefully mapped for improvements, accurately scaled to the situation present within the community. Some may have greater capacity due to resources or conditions, and this will be reflected in the projected improvements to the community over the twenty-year plan. This becomes the guidebook for the community, providing the image of improvements, the expected costs, and the metrics to measure the successful implementation of the plan.

Weaknesses

The planning process faces two main weaknesses that can impact successful implementation. The first is the high level of communication and collaboration needed to develop the plan and maintain the implementation of it. In the case study we held multiple meetings, emails and phone calls to keep the stakeholders abreast of the project and work with them. This was identified by

multiple federal employees in interviews as a successful process, but I cannot stress enough that this requires great work and presents an internal potential for plan failure. All stakeholders must stay engaged over the course of the development of the document as well as afterwards. This presents a weak link in any stakeholder who does not maintain this, but is especially apparent if the RO does not maintain communication with the stakeholders. If the RO is to be the facilitator of the master planning process and helps oversee the CIP portion, then the communication of status, progress and situations both at the RO and at the community location must be kept high or risk decreasing the open discussions and mutual trust created during the process. This trust cannot be emphasized enough, as it generates the willingness to communicate when a problem occurs, mitigate conflict through dialogue and decreases resistance to justifiable changes or deviations from the plan.

Due to the high requirement for participation and communication, it is unlikely that the full management, development and communication of master plans for an entire region could be managed effectively without a dedicated full time planner position. In developing the pilot project, including data collection, meetings, documentation, drafting and revisions, it took three months of work, which produced a draft document that was agreed upon by the stakeholders. The management of planning procedures and documents is a time-consuming process, requiring travel, phone calls, emails, presentation and charrette development and implementation, as well as researching community data, reports and referencing relevant policies to ensure alignment. Without a dedicated planner, the effectiveness of the planning process is significantly reduced, jeopardizing the increase in communication, and the accuracy of the data and information contained within the final plan.

Opportunities

Project funding is directly dependent upon accurate management of the Maximo database, and the master planning process, by creating a snapshot of the current conditions, conducts some of the needed evaluations of conditions. Funding support is likely to be significantly higher if the needs are clearly assessed, including expected costs and projected improvements.

Like project funding, it is likely that more funding for filling vacant employee positions can be awarded if the need is fully documented. The planning process would contain an assessment of the vacancies and list the reasons identified for these positions not being filled. This documentation would clearly identify that these vacant positions are negatively impacting the services expected of the stakeholders, providing justification for additional budget funding.

Threats

Total funding for each type of project is determined nationally, based upon the database reports, and other factors, to determine how much money will be allocated. This represents an annual pool of money that is subject to change every year outside of the control of the community or the RO. Funding for individual projects are awarded and taken from the total amount budgeted, but in times of financial crisis or shifts in political agendas this amount can become inconsistent and limit the ability to fully fund projects as identified in the master plan CIP. In interviewing two federal employees, both identified independently that funding continues to be the major limiting factor in successfully accomplishing projects and employment levels needed.

There may also arise sudden priority projects due to unforeseen issues such as natural disasters creating sudden health and safety hazards. These projects will always take priority due to their urgent and pressing nature, but they will undoubtedly impact the ability to maintain the timeline of the master plan. These unforeseen issues are beyond the control of any stakeholder, and arise independently. These could be severe weather causing structural damage, mold issues, complete structural destruction or a number of other issues and require immediate remediation above most other projects.

Limitations of the Model

The model, as identified above, has three limitations that I have identified: The need for strong engagement & communication, the strength & clarity of the document and the dependency upon funding for staffing needs, projects and development.

Within the case study and the literature, it is evident that the engagement was critical to the success of the planning process, and will continue to measure the progress at the location. This requires management of the plan and information through a direct individual whose sole job is to manage these plans and implementing the change process that is part of the overall objective. Looking at the commitment of time and resources it took to implement the pilot project, it is logical that any RO would need a dedicated planner to oversee all location master plans, including communicating between the RO Division of Facilities, the local agencies, and other stakeholders. This includes travelling to location to meet with stakeholders, hold meetings, charrettes, continual messaging and other forms of engagement to generate the information needed to develop, implement, nurture, and monitor the master plan(s). Given the amount of time this took a master's student intern to develop the drafted master plan, it is evident that to manage a region of master plans would require at least one full time employee.

A master plan is a snapshot, a roadmap and a visioning tool spun together in a single document, and as such the clarity of how it is written and the strength of the benchmarks and metrics will have a serious impact upon the success of the plan. The plan must realistically project what can be done in a reasonable amount of time, as the draft master plan does by projecting over twenty years the gradual improvements to the location. If a planning document does not clearly identify how they will accomplish their improvements and meet the needs of the stakeholders, within realistic expectations, then the plan becomes little better than a wish list. The final document must be reviewed and analyzed to ensure that it sets reasonable expectations for the stakeholders, or risk becoming a dust collector on a shelf.

The final limitation is a factor outside of the control of those involved in developing the plan: Allocation of Funding. Multiple federal employees interviewed identified that funding represents a major hurdle in accomplishing the work needed and required by BIA and DOI. Agencies and the RO can request funding, but they are subject to approval, and changes in budget nationally can have impacts upon the ability to meet the timeline and metrics outlined in the plan. While this does cause concern, it can also be addressed through the plan as well. The acknowledgement that the timeline, costs and projections are subject to funding helps defend the plan, demonstrates that the stakeholders and RO have a clear path to improve the communities.

Assessed Changes For Improvements

The plan that was created during the summer of 2016 as described in the case study was the first planning document for BIA that follows the template and assumptions discussed above, and as such there is room for improvement and refinement to increase the effectiveness of the plan. Having reevaluated the plan I have acknowledged some omissions in design and room for improvement that will enhance the strength and resiliency of the plan, the process and the communities:

- A section on stakeholder participation and collaboration
 - While the draft acknowledges those who participated in the process in specific instances scattered throughout the document, it does not have a formal section that identifies who is involved, the agreed upon goals and expectations of the process. This section should include the planned meeting types, those who participated and the key takeaways from these meetings. This section would be written as each collaborative effort took place, acting as a record, generator of stakeholder buy-in, and accountability factor for all stakeholders.
- The methods as written in the draft should be relocated to a regional plan
 - As the methods were written, their intent in developing annual meetings and events for staff and administration is geared towards a regional approach to increase communication and collaboration. These would be best implemented in a regional plan that considers all community master plans and develops the regional goals and agenda.
- Community SWOT analysis
 - The inclusion of a location section provides context in the plan, but it should also include a full SWOT analysis to encourage stakeholder discussion on the strengths, weaknesses, opportunities and threats presented to the community. This documentation, both in the process of determining it and as a metric for understanding the community, generates greater understanding of the existing and potential conditions within the community.
- Detailed discussion on metrics and benchmarks

- While the plan outlines improvements over twenty years and describes some methods on achieving this plan and adhering to the themes & goals, the amount of metrics and benchmarks could be enhanced. Metrics & benchmarks provide the measuring stick by which an organization can determine progress towards a goal, such as building progress, filling staff positions by specific times, or remediation of environmental hazards by a set timeline. These are just a few examples that could be used, and more should be used. The inclusion of an entire section following the CIP dedicated to quickly identifying what these measurements are and how they will be tracked will ensure that the plan is kept a living document that helps, not hinders, the stakeholders and the community.

Chapter 5: Roadmap to Replicate

Recreating the Process

Master planning is not a cookie cutter process, as each community is unique in demographics, design, resources and conditions. There is no direct formula, but there is a process. In this section, drawing and extrapolating from sources such as the Small Town Planning Handbook, I intend to outline the methods to recreate this planning process at another location.

In developing a master plan document, there is no size limit. A planning document must be the length needed to develop the context, tools, values and improvement plans. There is no minimum or maximum amount, but concise and accurate should be the goals. Relevant information can be placed in an appendix as supportive materials if needed as well. This is also by no means the limit to what can be included, but merely a starting point for developing a master plan.

I propose the following framework:

1. Executive Summary
 - a. A one page description of the community, the themes, the methods and improvements. This is designed to provide a quick and accurate idea of what the document will explain in greater detail
2. Table of Contents
3. List of Stakeholder Positions & signatures (only for final version of master plan)
4. Introduction
 - a. This provides sub sections in introducing the Intent of the document, The organizational and stakeholders' vision, mission and goals, and identifies the stakeholders involved
5. Community Context
 - a. Here the reader will be introduced to the location, providing brief history as well as the current staffing levels, the conditions of facilities, how consistent they are with the Maximo Database, and other detailed demographics as needed to develop a clear picture of the location. Some of this may be recent issues, disasters or similar that explain difficulties the community has faced.
6. Vision, Mission & Goals

- a. A quick outline of the organizational vision & mission, and identifying the goals agreed upon by stakeholders of the community and the RO.
7. Stakeholder Identification & Engagement methods
 - a. Clearly identifying identify the authority, limitations, and opportunities of the combined stakeholder programs, and what type of collaboration will be achieved is valuable documentation for buy in and accountability. Meetings will be arranged as early as possible (as discussed below) and will be documented in the plan. This will also document the outcomes of each meeting, not in minute detail but overarching agreements between stakeholders, or identifying what in the draft document or process needs to be changed based on feedback in the meetings. This should also include a section identifying every five years from acceptance of the plan to reconvene the stakeholders to assess whether the plan still accurately describes the community.
 8. Community Themes
 - a. Drawing upon the meetings, feedback, and discussions, a list of 3-5 themes will be outlined, defined and quantified in moderate detail. These themes are not policy bound, but they are intended to be the guiding framework for improvements and projects within that community. These must come from and be agreed upon by the stakeholders within the community, as they are most familiar with the needs, conditions, and potential of their community.
 9. Twenty Year Capital Improvement Plan
 - a. The CIP will be broken up into four sections representing five year increments. The first quarter will have the greatest detail in discussing proposed projects such as remediation of environmental hazards, repairs, improvements, demolitions and new construction. The first quarter should also carry moderately detailed cost estimates, providing an initial assumption for expected costs. For the following quarters, they should identify what projects are to be proposed within each quarter, and a general cost estimate for all projects within each quarter.
 10. Methods to Implementation
 - a. While the CIP chapter provides a timeline of events, this section is critical to keeping on track with the timeline by clearly identifying how it is achieved This is

the benchmarking and metrics section, a direct successor to the Twenty year CIP chapter. Here it should be identified how success is measured (is it decrease in environmental hazards by 20% every quarter until fully mitigated? Improvement in housing conditions based upon visual inspections? Utilization of a new checklist to streamline inspections? Improved conditions based on feedback from stakeholders through survey results?).

11. Appendix A

- a. This is to be a complete report of each individual facility condition, with a photograph of it. One page per unit and should include a brief description of the building, as well as the FCI from Maximo and if that is accurate based on meetings and visual inspections. Photos must be taken during the planning process to keep the information completely accurate and relevant

12. Appendix B

- a. Site map and quarterly improvements projection maps. This will be five maps, an existing site map, and a map for each successive quarter of the CIP, documenting the intended changes and improvements visually, through color gradients indicating changes in facility conditions and identifying proposed replacement building footprints.

Planning Process Timeline

Master Planning for locations, much like small town master plans, rely heavily on data collection, collaboration, visioning, identifying existing and future conditions and how to successfully achieve the future conditions. A basic timeline can guide the process:

1. Identifying and Communicating intent with a location to develop a plan
 - a. A plan cannot be developed without the support and buy-in from the community in question. If they are unwilling or unable at the current time to participate and actively engage then the plan becomes ineffective. If one location is unwilling to participate it is better to seek another that is willing, and return to the other afterwards. Some communities may be hesitant to volunteer, wishing to see if it will succeed first before they commit to the effort required.

2. Consolidation of existing data & relevant policies
 - a. “Planning is about learning” (Thomas L. Daniels 2007) This is true for all planners, and in the context of developing a planning document the planner must become familiar with what data is available through existing reports, maintenance needs, building conditions, staffing levels, and relevant policies.
3. First Meeting: Informational Session with Stakeholders and tour of facilities
 - a. This should be a series of first meetings with each stakeholder separately. This is intended to introduce the process in greater detail to the stakeholders and what is needed to ensure success of this process, and why it will work. Some stakeholders may be skeptical about the viability of the process, and will seek to understand how the plan will provide improvements for them. Explaining that the planning process helps organize the thoughts and needs of the community into a direct method, but to do that, all stakeholders are needed from the community to accurately achieve this. It does no good if a plan is developed that doesn’t align with the needs of the community, and the stakeholders are the experts on the existing conditions.
4. Draft introduction, community context and resources section of the plan
 - a. By this point it should be reasonable to have a rough understanding of the community context and resources based on data gathered and the feedback from the first meeting.
5. Assess consistency of Maximo Database with observations
 - a. Running in parallel to the draft, there should be comparisons documented of if the maintenance needs identified in Maximo are complete, as this will drastically impact funding. Identifying that there are inconsistencies or missing items in Maximo based on observations, quick inspections and feedback from stakeholders will help develop tools or methods with stakeholders to remedy potential barriers to inputting the data, as without accurate data in the Maximo database, funding cannot be allocated for projects.
6. Second Meeting: discussion of important themes to the community
 - a. This will be multiple meetings with the stakeholders separate of each other again, and is focused on discussing what issues are present within the community, what

limitations exist to address this, and if there are barriers from outside the community that interfere. This meeting would be crucial to have the Chief of the Department of Facilities to attend, so as to provide some context if identified issues come from the RO, but it cannot be stressed enough that the approach for these meetings is not to point fingers, but to acknowledge issues and limitations as well as why those exist and what opportunities there are to remedy them.

7. Begin drafting themes section of the plan
 - a. From the previous meetings, a general collection of themes in what the stakeholders have said will come to the surface. It is expected that there will be three to five themes present in context of what is important to the community. In the case study this was Housing Affordability, Community (Sense of Place), Employee/Stakeholder Housing Needs, and Retention. These will most likely vary between each community, and a fair amount of time should go into clearly identifying what each represents to the stakeholders.
8. Begin to develop twenty-year plan, including preliminary metrics/benchmarks
 - a. With a second meeting completed, the planner should begin to understand what the facility needs are. Using this information, the planner can draft an initial order of project importance on a unit by unit basis. This is more practical than separating out maintenance needs into individual items or groupings, as it is more efficient to plan for and implement a complete unit improvement or replacement.
9. Third Meeting: Present themes & twenty-year plan for stakeholders to agree or provide feedback upon themes, discuss potential improvement strategies
 - a. This will be the first meeting to have all the stakeholders together in one room. The intent is to ensure that what information has been stated matches with the themes identified. These themes can create a sense of unity, as they show that the stakeholders have similar goals and interests, and will begin to foster collaboration. It should be noted that the encouragement of this collaboration falls to the planner and the leadership.
10. Consolidate & distill observations & information from stakeholders & databases on conditions of facilities, community and resources (employee numbers, gaps in positions,

budgetary concerns, and other factors) into an assessment of the existing conditions section.

11. Fourth Meeting: Refining the metrics of the plan

- a. The benchmarks will need to be assessed by stakeholders to ensure that they are feasible and reasonable given the existing conditions.

12. Adjusting and Tweaking the Plan

- a. Most sections should be completed by this point, and the master plan draft should enter a revision phase within the Department of Facilities at the RO. The document should be checked for language, style, alignment with organizational policies, and level of detail and clarity.

13. Fifth Meeting: Presenting the Draft Plan

- a. Copies of the plan, printed and bound, will be handed out and discussed via a short presentation discussing the key elements of the plan. This should include the themes, the CIP and the methods for achieving the CIP as well as any other relevant information. In the case study, I presented the cost breakdown over each quarter and then identified what that budgetary cost would be each year, presenting a realistic and achievable number. This was presented alongside the timeline of expected changes in condition and environmental hazard mitigation.

14. Final Revisions based on Feedback

15. Final Meeting

- a. A presentation of the final document to all stakeholders, reviewing the critical points and a signing of the stakeholders' page for each position identified. This is the final accountability metric, which clarifies the role each will play to maximize the opportunity of success. The signature of each stakeholder is the formal acknowledgement that these roles are clear, and that the contents of the document is accurate, agreeable and in alignment with the community, the stakeholders and the organizational goals and mission.

In the case study to accomplish the final draft it took fifty days for an intern focused solely on one plan. To accomplish this in a reasonable timeline for a full-time planner managing multiple plans, it is reasonable to expect the process to take five months for the initial development of the plan. Ideally this should be started in the beginning of May and be completed by the end of

September, allowing for easier travel regardless of location due to weather patterns in an area. After the initial plan has been completed it is unlikely to take five months when the plan is to be reassessed every five years. This will take at most three months of meetings, discussions and revisions to a plan.

Chapter 6: Recommendations & Discussion

Based upon the review and assessment off both the Pilot Project Draft Plan and the Process to create it, I believe that the pilot project has great potential to address the issues identified both here and in the DOI Inspector General Report as well as provide long term planning improvements and visioning to strengthen and improve the communities and the region. Multiple federal employees noted that each agency is unique, and that there is no copy/paste solution to developing a master plan for each. To achieve these improvements and successfully implement master planning as described here, there are four recommendations that will enable the new planning process to maximize its effectiveness.

- The RO should hire a Full-Time Employee Planner who is familiar with master planning. This person is critical to the success, as they will manage the creation of plans, the communication and collaboration, and the future assessments and revisions of the plan. The amount of travel and work required to create, manage and fulfill master planning is significant, and unlikely to be accomplished in a reasonable timeframe for an employee split between other obligations and master planning. The utilization of a dedicated Full-Time Employee Planner removes the burden from other employees within the RO, allowing the planner to manage the plans and provide updates and communication, while the other employees of the RO DoF can focus on assistance and management of project implementation. This planner will take on the following duties;
 - New plans should be developed each year until all agency locations have master plans. Due to the time commitment, it is most effectively managed by one plan per year, allowing for flexibility in communication, revision and implementation of plans. In staggering these plans, it ensures that the five year review sessions for the master plans never overlap. Attempting to complete too many plans per year is likely to negatively impact the overall success of each plan.
 - Over time, master plans for agencies should be expanded beyond just the RO DoF concerns, and include community context for each department that interacts with them from the RO. The RO is comprised of multiple divisions, and as such the FTE Planner after all the initial plans are completed should begin to expand the scope of the master plans to include the broader context for each community and

each RO division. Ideally this expansion of the master plan would take place at the five-year review period for the community, and this is likely to take at least as long as the initial master plan creation. These will help the entire region plan and budget accordingly with a complete understanding of the communities the RO supports.

- Lastly, A Regional Master Plan should be developed, that identifies the SWOT of the entire region, drawing upon the community master plans, Superintendent feedback, and all effected stakeholders. This plan should develop regional communication and collaboration tools focused on effectively maintaining and improving communication between all stakeholders of the region, as well as identifying mission and vision for the region collectively. By developing such mission, vision, goals, strengths and limitations for the region, the RO can make long term strategic plans towards improvements or improved alignment with policy goals.

Without these recommended parts, the effectiveness of the master planning process will be drastically reduced, taking away the strength and opportunity for long term improvements and accurate assessments of each community. A great opportunity exists in this process, but planning is not a short-term solution. Master Planning shapes the path towards the future vision of the community and region, and with it the stakeholders can effectively prepare for and move towards these goals and visions.

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