



SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS

INDIANA UNIVERSITY

City of Bloomington Performance Measurements

Findings and Recommendations

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Prepared by:
Indiana University
School of Public and Environmental Affairs Capstone
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#Bloomington200

Indiana University
School of Public and Environmental Affairs
1315 East 10th Street
Bloomington, Indiana 47405

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Mayor John Hamilton
Bloomington, Indiana

Public officials must ensure citizens that government can effectively allocate tax dollars. Accomplishing this requires a strong foundation of performance metrics that are key indicators of program, equipment and operational success. Relevant performance measurements can inform future local policy, budgetary decisions and improve service. An effective system of performance measurements is also an integral part of the City of Bloomington's efforts to develop transparent government.

We are pleased to submit this report in response to your request for a study on performance metrics in five select departments with the City of Bloomington. Specifically, this report (1) analyzes those departments' abilities to measure budget goals from fiscal year 2018, including what is known about the quality of available statistical information; (2) identifies data gaps in department statistics; and (3) recommends strategies for improving budget goals with metrics for fiscal year 2019 and beyond.

If any questions about this report arise, please do not hesitate to contact the School of Public and Environmental Affairs Capstone faculty adviser, Mark M. Levin at levin2@indiana.edu.

SPEA Capstone Team of 2018
Professor Mark M. Levin
School of Public and Environmental Affairs
Indiana University

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Executive Summary

In the City of Bloomington and many other municipalities across the United States, performance measurements are insightful tools for management and achieving intentional goal outcomes. Nationally, municipalities are moving towards performance measurement practices to create policy, budgets, and improve service.

The authors of this report, *City of Bloomington Performance Measurements*, are Master in Public Affairs (MPA) candidates in a Capstone course at Indiana University, School of Public and Environmental Affairs (SPEA). The Capstone worked with the City to review performance measures utilized in five departments identified by the Mayor's office and to recommend modifications to existing performance measurements, as needed. Five small teams, consisting of four students each, partnered with the following departments: Community & Family Resources, Housing & Neighborhood Development, Planning & Transportation, Public Works, and Utilities

A narrowly tailored departmental scope of analysis was developed through conversations with City Department Directors and Capstone work sessions. To create consistency across departments, the Capstone used a three-prong approach where small groups of Capstone students were able to mold their recommendations to be as unique as the department with which they worked. In this report, each Department section begins by proposing budget goal recommendations through a method distinctive to that department. Each small group also addressed some of the unique challenges and recommendations they proposed for consideration. In the interest of uniformity between the department-specific recommendations, each small group was tasked with introducing specific, measurable, achievable, relevant, and time-bound (SMART) recommendations for budgetary goals based on the FY 2018 budget cycle as a revision of a proposed FY 2019 budget goal. Next, the small department-specific teams identified and suggested key performance indicators (KPIs) that were reflective of department goals. Following the departmental performance measurements sections of this report, the Capstone identified three City-wide recommendations to the Mayor's office.

During this 12 week project, SPEA Capstone students: (1) interviewed City officials to determine how Departments currently measure program performance; (2) reviewed existing measures of performance for clarity and utility; (3) reviewed annual budget trends to gain a better understanding of current practices and issues; (4) researched KPIs in other cities; (5) presented recommendations in City Council Chambers to City staff; and (6) submitted this final report.

The City-wide proposals include short- and long-term recommendations. In the short-term, Departments should determine SMART budget goals for FY 2019 and coordinate Trello training. In the long-term, the City would greatly benefit from integrating existing software and datasets into a performance dashboard. The sample dashboard recommended at the end of this report is a good example of a tool for organizing performance measurements. Incrementally continuing to identify KPIs in all departments with projects like this would give rise to a performance dashboard. These steps will give citizens, elected officials, and staff transparency in understanding a Department's success. With leadership from the Mayor's office, both performance measurements and management are achievable.

Project Overview

Scope and Approach

The Indiana University School of Public and Environmental Affairs (SPEA) Capstone team (See Appendix A and B) worked with the City of Bloomington to review the performance measures utilized in five City departments identified by the Mayor's office and to recommend modifications to existing performance measures as needed. Performance measurement has many meanings. Here the term is defined as the result or outcome that assists managers in establishing accountability and transparency for all Departments.

The scope of our engagement has been to improve the performance of the five designated departments by working on the following objectives:

1. Establish measurable outcomes to facilitate departmental objectives;
2. Establish baseline data for future comparison;
3. Identify measurements of critical data to help analyze performance and potential improvement;
4. Recommend methods of accountability for individual departments;
5. Improve transparency and accountability to the Mayor, City Council, and the community; and
6. Utilize information technology to improve departments' efficiency and performance measurement.

A narrowly tailored departmental scope of analysis was developed in collaboration with each of the assigned Department heads. To create consistency across departments, the Capstone used a three prong approach in which small groups of Capstone students molded their recommendations to fit the departmental needs with which they worked. In this report each Department section begins by proposing budget goal recommendations through a method distinctive to that department. Each small group also addressed some of the unique challenges and recommendations they proposed for consideration. In the interest of uniformity between the department-specific recommendations, each small group was tasked with proposing specific, measurable, achievable, relevant, and time-bound (SMART) recommendations for budgetary goals based on the FY 2018 budget cycle as a revision or a proposed FY 2019 budgetary goal. Next, the small department-specific teams identified and proposed key performance indicators (KPIs) that were reflective of department goals. Following the departmental performance measurements sections of this report, the Capstone identified three City-wide recommendations to the Mayor's office. Additionally, the Capstone worked to create recommendations to the Mayor's office that extend across all departments and encompass both short- and long-term goals for the City of Bloomington.

SMART Goals

Developing clear, measurable goals is critical to managing Department and City-wide performance. The team proposed revising many of the FY 2018 budgetary goals by following SMART principles. These criteria create a better sense of performance so staff and managers can easily track performance quantitatively and communicate externally with higher accountability.



Goals should be simply written and should clearly define what the Department is going to do. Specific to this process is the What, Why, and How of the SMART model.

Specific

Example: By August 1, 2020, implement a new performance management system for the Mayor, Department Directors, and City staff using clearly defined processes and guidelines so employees and managers can more competently evaluate performance and develop their careers.



Explanation of Example: “Implement a new performance management system for the Mayor, Department Directors, and City Staff” = what

“using clearly defined processes and guidelines” = how

“so employees and managers can competently evaluate performance and develop their careers” = why



Goals should measure tangible evidence so the Department can point to an accomplishment. Usually, an entire goal statement is a measure for the project, while also containing several short-term or smaller measurements.

Measurable

Example: By August 1, 2020, implement a new performance management system for the Mayor, Department Directors, and City staff using clearly defined processes and guidelines so employees and managers can more competently evaluate performance and develop their careers.



Explanation of Example: The essential metric is whether or not the system is operational by August 1st.



Attainable

Generally, goals should be achievable within the time allotted and the resources allocated. However, goals should challenge Departments to be the best versions of themselves. Departments must possess the appropriate knowledge, skills, and abilities necessary for achieving their goals.

Example: By August 1, 2020, implement a new performance management system for the Mayor, Department Directors, and City staff using clearly defined processes and guidelines so employees and managers can more competently evaluate performance and develop their careers.



Explanation of Example: In order for you to reach this goal, you must have a skill set, in this case, the area of performance management, that allows you to understand the nature of the goal; the goal must also present a large enough challenge for you to remain interested in and committed to accomplishing it.



Relevant

Goals should measure relevant outcomes, not activities.

Example: By August 1, 2020, implement a new performance management system for the Mayor, Department Directors, and City staff using clearly defined processes and guidelines so employees and managers can more competently evaluate performance and develop their careers.



Explanation of Example: The result of this goal is a process that allows employees and managers to more competently evaluate performance and develop their careers, not the individual activities and actions that occur in order to make the goal a reality.



Timely

Goals should be linked to a timeframe that creates a practical sense of urgency or results in a positive tension between the current reality and vision of the goal.

Example: By August 1, 2020, implement a new performance management system for the Mayor, Department Directors, and City staff using clearly defined processes and guidelines so employees and managers can more competently evaluate performance and develop their careers.



Explanation of Example: August 1, 2020 provides you with a time-bound deadline.

The concept of writing SMART goals is very important for accomplishing individual goals, which are linked to department, division, and City-wide goals. Moreover, SMART goals are critical for ensuring good communication between employees, supervisors, City Council, the Mayor, and the public.

Literature Review and Benchmark Cities

What is Performance Measurement?

To fully assess the current state of Bloomington's performance measurement practices and prescribe improvements for the future, it is first necessary to understand the basic concepts of performance measurement. The United States Government Accountability Office explains in a 2011 report, "Performance measurement is the ongoing monitoring and reporting of program accomplishments, particularly progress toward pre-established goals. It is typically conducted by program or agency management."¹

Moullin explains, "Performance measurement provides the information needed to assess the extent to which an organization delivers value and achieves excellence."² Performance measures must be clearly defined and communicated in order to function correctly. To monitor performance, managers must determine "how program results can be defined, measured, and reasonably compared."³ Making such determinations can be a difficult task. As Neely notes, "It is not unusual to observe two people heatedly arguing over some dimension of performance and later find that the root cause of their disagreement was the imprecise definition of a measure."⁴

Performance measurement can be a powerful tool for cities because it is "effective for improving communication, increasing awareness about results, improving service quality, and changing strategies to reach certain results."⁵ Management can use performance measures to fulfill one or more of the eight following purposes:⁶

1. *Evaluating* the current status of a program's performance;
2. *Controlling* the management of subordinates;
3. *Budgeting* with critical decisions;
4. *Motivating* employees to improve performance;
5. *Promoting* an organization's performance to stakeholders;
6. *Celebrating* organizational accomplishments;
7. *Learning* whether or not a program is working (and why); and
8. *Improving* the organization's performance in the future.

¹ United States Government Accountability Office. "Performance Measurement and Evaluation." GAO-11-646SP (2011).

² Max Moullin. "Performance Measurement Definitions: Linking Performance Measurement and Organizational excellence." *International Journal of Health Care Quality Assurance* 20 (2007): 181-183.

³ Katherine.G. Willoughby. "Performance Measurement and Budget Balancing: State Government Perspective." *Public Budgeting & Finance* 24 (2004): 21-39.

⁴ Andy Neely. "The Performance Measurement revolution: Why Now and What Next?" *International Journal of Operations & Production Management*, 19(2). (1999): 205-228.

⁵ Katherine.G. Willoughby. "Performance Measurement and Budget Balancing: State Government Perspective." *Public Budgeting & Finance* 24 (2004): 21-39.

⁶ Robert.D.Behn. "Why Measure Performance? Different Purposes Require Different Measures." *Public Administration Review* 63 (2003): 586-606.

Additionally, performance measurement can help cities connect with citizens. Citizens, who have access to information about government performance shift their level of satisfaction based upon this information.⁷ Halachmi and Holzer note the virtues of involving citizens in the creation of performance metrics.⁸

The City of Bloomington has already taken steps to inform its citizen of its performance metrics using citizen feedback through the Bloomington Community Survey. Such community surveys have proven to be useful tools for evaluating citizens satisfaction with municipal service quality.⁹ Additionally, performance measurements for the previous year have been included in the annual budget, which is made available to the public.

The literature also suggests that successful use of performance information constitutes more than the simple collection of metrics. For example, the most effective way to leverage performance information is to use it for both accountability purposes and for improving performance.¹⁰ However, understanding the difference between performance measurement and performance management is crucial for governments.¹¹ Performance measurement involves collecting performance information, while performance management means implementing changes to improve the organization's operations.¹² This report offers recommendations to assist the City in moving forward with its transition from performance measurement into performance management.

Benchmark Cities

This report also examines some cities as a source of comparison and research. At the suggestion of Deputy Mayor Mick Renneisen, we examine the following cities:

- Ann Arbor, Michigan
- Asheville, North Carolina
- Austin, Texas
- Portland, Oregon

Several departmental analyzes use other cities to give examples or ideas about performance measurements the City of Bloomington could consider adopting. The subsequent sections of this report utilize these cities to inform our department-specific and City-wide recommendations.

⁷ Oliver James. "Performance Measures and Democracy: Information Effects on Citizens in Field and Laboratory Experiments." *Journal of Public Administration Research and Theory* 3 (2011): 399-418.

⁸ Arie Halachmi and Marc Holzer. "Citizen Participation and Performance Measurement: Operationalizing Democracy through Better Accountability." *Public Administration Quarterly* 34 (2010): 378-399.

⁹ Janet M. Kelly and David Swindell. "A Multiple Indicator Approach to Municipal Service Evaluation: Correlating Performance Measurement and Citizen Satisfaction across Jurisdictions." *Public Administration Review* 62 (2002): 610-621.

¹⁰ David Ammons. "Katherine.G. Willoughby. "Performance Measurement and Budget Balancing: State Government Perspective." *Public Budgeting & Finance* 24 (2004): 21-39." *Public Management Magazine* (2015): 8-11.

¹¹ Ibid.

¹² Ibid.

Community & Family Resources

Introduction and Scope

Cities across the United States provide programming and resources to improve their residents' quality of life, just as the City of Bloomington does through the Community and Family Resources Department (CFRD). These resources and programs facilitate engagement through volunteering; encourage diversity and inclusion; and provide assistance in areas regarding health, accessibility, and safety.

In working with Director Beverly Calender-Anderson to achieve a greater understanding of the role CFRD plays in providing these resources, the team determined CFRD's uniqueness when compared to initiatives across the country. Not one benchmark city provided a range of resources comparable to Bloomington's CFRD. This finding makes performance measurement and metrics even more imperative to establishing a baseline and measuring growth and impact over time for this department. In some sense, the CFRD of Bloomington is its own benchmark.

In meetings with Director Calender-Anderson, the team recognized the difficulty this department experiences when it attempts to capture performance through metrics. Although CFRD uses Trello, creates goals, and tracks all the resources expended on each project, there is still room for CFRD to improve its performance. Additionally, CFRD's goals have two specific challenges: (1) not all goals can be substantially quantified and (2) a noticeable portion of the services CFRD provides are unforeseeable and are upon request.

There are many facets to consider when your overall mission is to improve quality of life and this will likely look different in each community. Training, labor, expenses, and funding are not difficult to measure, but interpersonal interactions and impact are harder to quantify. The goals that the ten employees of CFRD are faced with each day include tasks with overarching themes that provide knowledge, promote engagement, and instill awareness. How does one successfully measure awareness? Successful execution and achievement of these goals includes a promise of transparency to the citizens of Bloomington. Thus, creative performance measurement must be cultivated and consistently utilized.

We reference four other cities and two Bloomington departments in our research. They were used to identify industry standards and strategies that are applicable to achieving a more efficient use of performance metrics to create SMART goals and sustainable initiatives. These cities and departments provided helpful recommendations for further improvements to the City, which we address in the following section.¹³

¹³ Our team created a supplemental report for CFRD in this project to indicate additional specific analyses to the Department. Details on specific comparison cities are included in the supplemental report.

FY 2018 Budget Goals

The FY 2018 budget goals of CFRD were divided into 5 sections: (1) engagement, (2) safety, civility and justice, (3) diversity, (4) health outreach, and (5) commissions. These goals were based on the functions of each activity, whereas the FY 2017 budget goals were based on projects or programs. This change in the structure of budget goals enables CFRD to illustrate how the joint activities of the Department lead to accomplishing its goals. For example, in FY 2017, the activity of providing Latino people with engagement opportunities and providing opportunities to young people were in different sections, but were integrated into the engagement section regarding their functions in FY 2018. This integration or categorization was significant to enhance CFRD accountability to the public because most of the public look to the performance of the City based on function, not solely based on programs or opportunities offered.

Although CFRD has made efforts to improve performance management activities, performance measurement improvements are still warranted. First, CFRD should always include quantifiable metrics in its goals. However, this can be challenging for this department particularly because the goals of this department are closely related to subjective determinations, such as awareness. This does not lead to the conclusion that CFRD can establish only abstract goals or goals just related to activities (e.g. the number of meetings coordinated) or outputs (the number of participation in events). In the last section of this departmental analysis we created Key Performance Indicators (KPIs) for CFRD programs. A community survey for residents and a school survey for youth are also critical to measure KPIs and outcomes relevant to the Department's goals and mission.

In our review of the FY 2018 budget, the team identified current CFRD goals that we perceived to be on par with the performance measurement that the City is looking to capture. Our team used the following two goals as examples pulled from those we identified.

- Diversity: Work with Islamic Community Center of Bloomington, Islamic student groups and Asian community members to increase representational diversity in local government (boards, commissions, committees) by 10%.
- Health Outreach: Coordinate six blood drives in collaboration with the American Red Cross (City employee, Fallen Officers, City/County employee and 3 Farmers Market drives). Additionally, will collaborate with one local business to sponsor an on-premises blood drive. Goal: 100 pints of blood.

These are quantifiable goals; they measure outputs and not outcomes. They are clearly measured and are goals that hold CFRD accountable to the public. In a future section, we provide more information about outputs and outcomes, as they are important steps in the logic models we created to help CFRD with future goal setting.

CFRD should also create goals with deadlines included. Including deadlines supports the accountability and transparency goals of the City. The duration includes short-term (within one year), middle-term (1-2 years), and long-term (3-5 years). The goals about activities or outputs tend to be short, while the goals about outcomes are likely to be long-term.

In the next section, we discuss examples pulled from current goals of improvements that can be made by adding quantifiable metrics and deadlines. The discussion of quantifiable metrics includes the importance of clarifying baseline performance and comparing the situations between pre- and post-activities in order to measure improvement caused by the performance of the department.

FY 2019 Budget Goals Recommendations

In addition to the goals we discussed in the previous section, there are still goals that CFRD can improve. We found four common issues with the Trello goals of CFRD and discussed these issues with Director Calender-Anderson. The Director was very cooperative and helpful in providing the Capstone group with information needed to develop new goals. The suggestions below were shared with and supported by Director Calender-Anderson.

Type 1 - Improved from Baseline

Within the Engagement initiatives of CFRD, our team identified goals that could be more effective if improved with baseline data paired with the intended future goal. The example below falls under our suggested category of goals that can be improved from its baseline. This reconfiguration shows improvement from where the Department started and where they aim to go.

We determined this goal would be more productive if broken down into two separate goals that support CFRD’s attempt to increase volunteer opportunities and the number of Latino volunteers. The suggested rewrite captures both goals mentioned above, while acknowledging an improvement from the original baseline to the new goal.

Engagement	
FY18 Goal	FY19 Goals
Increase volunteer opportunities by three (3) to Latino community members and allies to assist with Hola Bloomington and other Spanish-speaking programs on WFHB.	(1) Increase volunteer opportunities for Latino community members from X to Y. (2) Increase the number of volunteers assisting with Hola Bloomington and other Spanish-speaking programs on WFHB from 9 to twelve 12.

Similar to the engagement goal, our team identified a CFRD Commission goal that benefits from the same restructuring. As seen below, this new goal quantifies improvement and supports productivity. It would not be nearly as productive to survey existing public facilities each year, so we recommend adjusting this goal to include revisiting facilities that request a survey or those who completed CFRD recommendations to become ADA compliant. Additionally, the goal provides greater transparency

to the citizens of Bloomington regarding the measures the City is taking to support and encourage accessibility in business establishments.

Commissions	
FY18 Goal	FY19 Goal
Survey new and existing public facilities for ADA compliance with a goal of awarding 30 new businesses with decals.	Survey new public facilities and revisit the appropriate existing facilities for ADA compliance with a goal of increasing compliance from X to Y businesses with decals.

Type 2 - Quantifiable Metrics

Our team created another category that includes goals requiring the inclusion of quantifiable metrics. These goals typically acknowledge a desire to improve productivity, but do not include any metrics for how that improved productivity will be accomplished. Typically, these types of goals include action words like “create,” “improve,” “produce,” or “expand.” However, these terms do not provide the framework necessary to measure the achievement of the goal. For example, two Health Outreach goals identified from the CFRD FY 2018 Budget that aim to capture impact from programming and services.

Health Outreach	
FY18 Goal	FY19 Goal
Create and produce educational materials on warning signs of drug use and prevention, targeting middle and high school youth and their parents.”	Create and produce one package of educational materials for youth and parents on warning signs of drug use and prevention, for each of the 3 middle schools and 2 high schools in the City during the current school year.

Health Outreach	
FY18 Goal	FY19 Goal
Facilitate 48 weekly smoking cessation classes in collaboration with IU Health Bloomington and Volunteers in Medicine.	Facilitate 48 weekly smoking cessation classes with an average enrollment of not less than 20 participants per session. Six months following the final session there will be less than a 50% recidivism rate.

Note: CFRD has recently started monitoring recidivism. We have suggested that a recidivism metric be created after data begins to accumulate.

Type 3 - Pre- and Post-Survey Improvements

The third category that our team suggests includes goals that can be improved based on pre- and post-surveys. By strategically improving surveys for different events and services, CFRD can capture more pertinent information that will help in creating future goals that are relevant and accurate to each event, initiative, or commission. One example of this can be seen by using another FY18 Budget goal as an example: “Coordinate a Youth Citizens Academy for 60 middle school aged students living or attending school in Monroe County to increase participants’ knowledge of local government and government resources.” The Youth Citizens Academy aims to provide education on volunteerism, peaceful protest, and advocacy while teaching middle school aged students about the duties and responsibilities of local government.

This initiative’s impact can be measured more successfully by implementing pre-and post-academy surveys that include specific questions measuring an increase in knowledge and awareness. It could even go as far as measuring the influence this type of programming has on the likelihood of those young citizens becoming more engaged citizens in the future. However, that research would need to be addressed at a different time, as it does not pertain to current performance goals and metrics. Additionally, the rewriting of this goal and similar goals will need to be done after more data is gathered. This will direct the Department on which questions are necessary to ask in determining the necessity of the program or service.

Type 4 - Incorporation of Deadlines

The fourth and final category includes goals benefitting from the inclusion of specific deadlines. Due to the uniqueness of CFRD and its offerings, it is not realistic for every CFRD goal to include some type of quantitative metric. However, by including deadlines, CFRD is able to remain consistent with the transparency goal of the City while providing a timeline for completing tasks to ensure productivity. Our team was able to restructure two goals pertaining to the Diversity initiative with Director Calender-Anderson.

Diversity	
FY18 Goal	FY19 Goal
Work with Human Resources Director to develop and implement diversity/inclusion training module to be required for all 690 City staff.	Work with Human Resources Director to develop diversity/inclusion training module to be completed by all 690 City staff by October 30.

Diversity	
FY18 Goal	FY19 Goal
Train six diversity and inclusivity trainers from across City departments and disciplines.	Train six diversity and inclusivity employee trainers from across City departments and disciplines by December 31.

These examples are provided in an effort to make this new approach to goal writing and performance management for CFRD a smoother process. As it pertains to our typologies, it is not necessary for goals to fit into one specific box. New goals can have quantifiable metrics with a deadline. They can also be organized to utilize survey data and include improvements from baseline date. Incorporating these small changes will make performance management much more useful. It also will make any transitions from turnover in positions more smooth. New employees will have a roadmap provided to them with room to incorporate new ideas and continue growing the initiatives of CFRD. Following this section, we will present more about our process for writing new goals that align with the uniqueness of this Department.¹⁴

Additional Recommendations

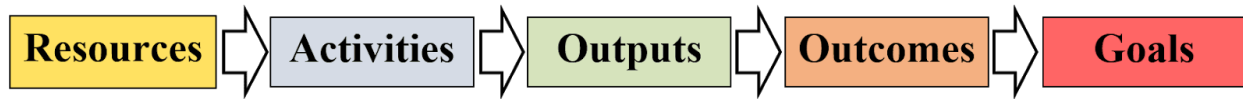
Logic Models

In addition to improving existing goals, the Department should set new metrics in the FY 2019 goals, particularly in terms of measuring outcomes. To clarify what to measure for performance management, we created logic models for each section of FY 2018 budget goals. A logic model is a systematic and visual method to present the relationships among the resources and the goals. It has five components: resources (or inputs), activities, outputs, outcomes, and goals (See Figure 1).¹⁵

¹⁴ Other goals needing improvements are included in the supplemental report for CFRD.

¹⁵ W.K. Kellogg Foundation, *Logic Model Development Guide*(Battle Creek: W.K. Kellogg Foundation, 2004).

Figure 1: Five Components of Logic Model



These components enable the organization to explain the investments of human, financial, and organizational resources that will result in the outcomes that the Department aims to achieve. Those resources and activities are what the organization provides each program to ensure its success. Outputs are the immediate results of the activities and outcomes are desired accomplishments, or changes, for the expected long-term goals. Goals are a long-term influence on communities or organizations.

This is a useful method to clarify performance measurement particularly when outcomes are ambiguous. For example, when the activity is to establish a youth volunteer program and the goal is to build a strong, healthy, and engaged community, the initial logic model will emulate Figure 2. Based on this information, we clarify the logic. Once our team established the logical connection between resources and long-term goals, a performance index was created (See Figure 3).

Figure 2: Process for Clarification of Logic

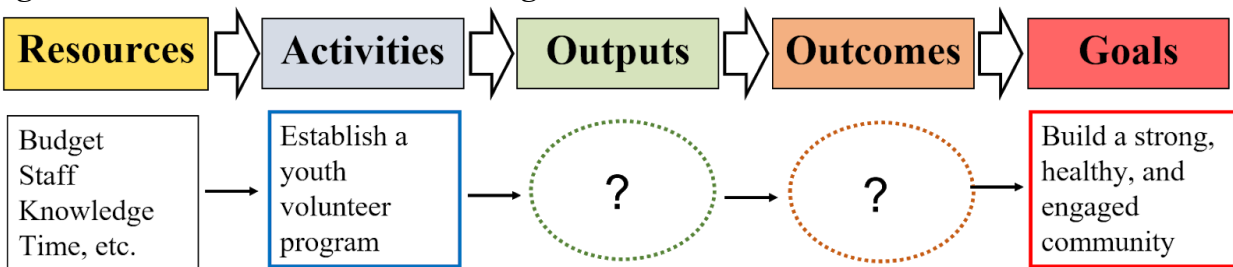
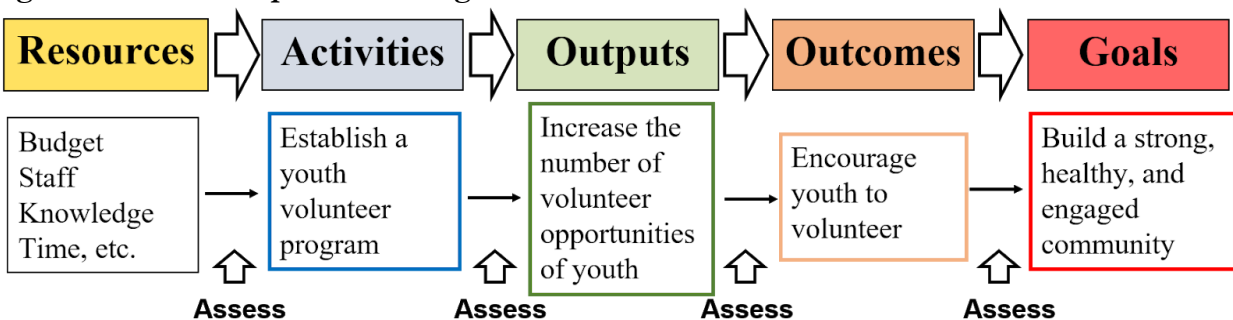


Figure 3: Relationship between Logic Model and Performance Measurement



With the assumption that the structure or categorization of FY 2019 budget proposals of CFRD is the same as FY 2018, we identified the activities and goals of CFRD based on the FY 2018 budget proposal. Then we clarified the logic between the activities and goals of each budget category of CFRD and established quantifiable metrics to assess the logic of each category. In the clarification of the logic and establishment of the quantifiable metrics, we asked Director Calender-Anderson and

other department members to check whether or not those logics and metrics naturally work for the department. They gave suggestions and provided corrections that the Capstone group implemented. The staff seemed to be pleased with the logic and metrics.

Community and School Surveys

In analyzing the logic models, we found the desirability of a biannual City-wide community survey. As discussed, the outcomes of CFRD programs are closely related to subjective feelings or awareness of the residents. These outcomes cannot be measured by objective statistical data like the majority of other departments of the City. This means KPIs can be less easily measured than other departments because KPIs should measure the outcome of the Department's performance. To assess the outcome of the performance of CFRD, the Department should seek additional feedback from the community.

In that sense, a community survey becomes an effective tool for performance measurement of CFRD, as well as other departments. Similarly, because CFRD has some programs targeting young people, such as providing them with volunteering opportunities, they could also conduct a survey for middle schools and high schools.

The City conducted a City-wide survey in 2017, and this can be a model of the community survey or school survey CFRD will conduct. However, the questions of the City-wide survey were more general questions about the quality of life in Bloomington. We recommend the City's regular survey include more specific questions about community and family resources to evaluate the performance of CFRD. The surveys can be conducted as a revised City-wide survey, but surveys also can be conducted by CFRD independently. Also, because these surveys require fiscal support, along with the time it will take the Department's programs to develop outcomes, the surveys do not necessarily need to be conducted each year. We think it is realistic that they are carried out every 2 years.

One important point of the community survey is response rate. The response rate of the City-wide survey in 2017 yielded 21%. This rate cannot be said to be high. The Department should make efforts to increase the response rate of a community survey. On the other hand, we predict the response rate of a school survey to be higher because the City asks the school to distribute it. Therefore, the Department should pay attention to the following points in conducting the survey.

- Clarify the purpose of the survey.
If the residents cannot understand the purpose, they are not sure about whether or not they should respond to it. It is important to indicate the purpose of the survey is to measure performance of the department and to reflect the feedback to the future policy.
- Make questions easy to answer.
The department should avoid ambiguous questions, multiple questions lacking proper answers for some residents, too many open-ended questions.
- Reduce the number of questions to a minimum.
As we indicate the examples of questions later, if CFRD independently conducts the survey

to measure KPIs, less than 20 main questions will be enough. Even if it includes the questions to ask other metrics in Appendix, the number of main questions will not exceed 30. The number of pages of the questionnaire should not exceed 5 letter-sized pages with the font size of 12.

- Conduct survey not only by mail but also online more actively. It is usually easier to respond online than by mail for the residents who have PCs or smartphones.
- Send follow-ups to the mail survey. According to the book on public program evaluation written by Langbein and Felbinger, “you should send out surveys once, wait two weeks, then send out a second wave, wait another two weeks, and then possibly send out a third wave,” and “If you get 50 percent on the first try, count on getting half that on the second try from the non-respondents, and half of the second-try response rate (based on the still remaining, stalwart or stubborn, nonrespondents) on the third try.”¹⁶

In the next section, we explore the result of logic model analyses including what should be KPIs for each category, and what metrics should be included in a community survey or school survey. In the logic models, we established other metrics than KPIs so that CFRD can manage the process to improve the outcomes measured by the KPIs. Those other metrics should be reflected in the Trello cards, and we have provided them in our supplemental report to CFRD. We also describe justification of KPIs and how to word questions in a community or school survey so that they provide the necessary information as it pertains to the KPIs of the Department.

KPIs Engagement

KPI	<ul style="list-style-type: none"> ● Percentage of residents who volunteered in one year ● Number of volunteer hours per person in one year ● Percentage of residents who feel the City’s volunteer network reflects the diverse population
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CFRD has made an effort to increase the number of volunteers and develop a range of volunteering opportunities. The logic model of this section can be found in Appendix C, Figure C1. Particularly, the department emphasizes the volunteering of youth and the Latinos through activities such as the youth volunteer program and the Hispanic Heritage Month events in 2018. Also, CFRD volunteer network helps to make volunteer opportunities around the City and at nonprofit organizations available to residents. Therefore, to assess the achievement of the engagement goal, these KPIs could be measured in both the community survey and the school survey. We are aware that the City

¹⁶ Laura I. Langbein and Claire L. Felbinger, (2006). *Public program evaluation: A statistical guide* (London: M.E. Sharpe, 2006), Chapter 8.

has employed an outside contractor to help with developing the community survey and its questions, but as an example, a survey question could ask:

(1) Did you volunteer at all last year? If yes, how many hours did you volunteer last year? If none, why?

- a. I had no time to volunteer.
- b. I had no interests in volunteering.
- c. I had an interest, but I did not know of volunteer opportunities., etc.

(2) Do you feel that the City’s diverse population is reflected in the volunteer opportunities and participants? If no, what age group, gender, or ethnicity do you think the City does not involve?

Safety, Civility, and Justice (SCJ)

KPI	<ul style="list-style-type: none"> ● Percentage of residents who feel the City government communicates well with the public on SCJ issues ● Percentage of residents who feel the City is safe ● Percentage of residents who feel the City is civil ● Number of homeless people
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This section has a unique aspect in terms of performance measurement in comparison with the other sections. The logic model of this section can be found in Appendix C, Figure C2. Regarding the SCJ issues, Mayor Hamilton introduced a new initiative and established the Safety, Civility, and Justice Task Force. CFRD is trying to “develop strategies to prioritize, implement, fund and evaluate the final recommendations of the task force.” Also, since the creation of the SCJ Metric Development Team, CFRD staff met with the team every other month to establish baselines for success of the initiative. Therefore, we thought that the metrics of the outcomes from the task force recommendations should be finally determined by discussing them with the Community Coordinating Council (CCC) and SCJ Metric Development Team.

However, even under such discussion, we recommend some KPIs based on the logic model. CFRD is making efforts to explain the progress of the initiatives to the public in CCC and to maintain open communication and ongoing dialogue with stakeholders, such as downtown businesses regarding SCJ issues. Therefore, the trust Bloomington residents have in this process as it pertains to these SCJ issues should be measured.

Furthermore, because these activities and the task force recommendations are performed in an effort to “create a community climate where residents and visitors feel safe and behave with civility,” the percentage of the residents who feel the City is safe and civil should be measured.

CFRD also thinks the homeless population is an important issue, so they created and maintained the Homelessness Services webpage in FY 2018. The number of homeless people in the community should be selected as a KPI. To measure these KPIs, a survey could ask:

(1) Do you feel the City government communicates with the public on SCJ issues well?

If not, what issues do you think are inadequate to communicate?

- a. Aggressive panhandling
- b. Drug abuse
- c. Suicide
- d. Others (_____)

(2) Do you feel this City is safe? If not, what areas do you consider unsafe?

- a. Downtown
- b. Around campus
- c. Others (_____)

(3) Do you feel this City is civil? If not, why?

Diversity

KPI	<ul style="list-style-type: none">● Percentage of residents who feel the City government is open to diverse people● Representational diversity in the City government● Diversity in the City
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The activities of CFRD on diversity can be divided into two categories: enhancing diversity in the City government and the City. Additionally, the logic model for this section can be found in Appendix C, Figure C3.

CFRD works with the Bloomington Human Resources Director to develop and implement a diversity/inclusion training module and conducts or coordinates “Train the Trainer” sessions for all potential Diversity/Inclusion trainers. The department is also trying to develop more effective strategies to recruit and attract a more diverse applicant pool for position vacancies. According to Director Calender-Anderson, the purpose of these activities includes not only raising awareness for the City staff on diversity or to enhance representational diversity, but also to make City employees more aware of potential biases. As such, CFRD could adopt the suggested KPIs to measure this outcome.

It is important for the City to enhance diversity in the community, and this could be measured in a community survey. Regarding the KPI on representational diversity, CFRD already set a numeric goal. One of the goals is to work “with the Islamic Community Center of Bloomington, Islamic student groups, and Asian community members to increase representational diversity in local government (boards, commissions, committees) by 10%.” As an example, a survey question could ask: Do you feel that the City government is open to diverse people? If not, what age groups, gender, or ethnicity do you think the City government is not open to?

Health Outreach

KPI	<ul style="list-style-type: none"> ● Number of deaths from illness ● Number of cases of drug abuses ● Number of suicides ● Percentage of residents who think people who abused drug before can recover and return to the community ● Percentage of residents who smoke at least once a week
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CFRD conducts a variety of activities on health issues; therefore, more KPIs are necessary to accomplish sufficient performance measurement than in other sections. The logic model for “Health Outreach can be found in Appendix C, Figure C4.

First and most importantly, CFRD supports several health policies. The purpose of blood drives, HIP 2.0, health education, and study of federal and state health policies are to have residents be healthy and to decrease the number of deaths from illness. The number of deaths from illness should be considered a KPI that is measured as the outcome of activities on health policies.

The Department also takes action to address large health issues: drug abuse, suicide, and smoking. Regarding drug use, the CFRD is trying to increase “community knowledge of opioids and addiction and reduce the stigma of recovery through service on the Monroe County Substance Abuse/Mental Health Committee and Monroe County Syringe Services Advisory Board.” Therefore, those numbers should be measured as KPIs. As an example, a community survey could ask: Do you smoke at least once a week? How often? Why?

Commissions

This section integrates budget goals of 8 commissions and councils. However, we did not analyze the Monroe County Domestic Violence Coalition because CFRD only provided administrative support to it in the FY 2018 budget. Consequently, we discuss KPIs of 7 commissions and councils respectively.

Commission on Aging

KPI	<ul style="list-style-type: none"> ● Percentage of residents who know what “creative aging” means ● Percentage of residents who know what are “seniors in poverty” issues
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The Commission on Aging coordinates several community events regarding creative aging and “seniors in poverty” issues through its FY 2018 budget goals. The logic model of this commission can be found in Appendix C, Figure C5. The commission also creates a one-page statistical summary of factoids about seniors living in poverty. In the future, the outcomes of those events and data analysis should be measured as KPIs. This criterion should be measured in a community survey and

as an example, a question could ask: Do you know what “creative aging” means or about “seniors in poverty” issues?

Commission on Hispanic and Latino Affairs

KPI	<ul style="list-style-type: none"> ● Percentage of residents who feel familiar with Latino culture
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The main activity of the Commission on Hispanic and Latino Affairs in the FY 2018 budget is to coordinate Fiesta del Otoño. The significant purpose of this event is to share Latino culture in the community to ensure a thriving community. The KPI correlated to these activities, which measures the recognition of residents about Latino culture, should be measured. The logic model for this can be found in Appendix C, Figure C6. Additionally, this criterion could be measured in the suggested community survey by asking: Do you feel familiar with Latino culture? Why or why not?

Commission on the Status of Black Males

KPI	<ul style="list-style-type: none"> ● Percentage of youth who think healthy race relations are important for personal and professional growth
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The purpose of the Commission on the Status of Black Males includes several goals, such as to “develop action committees addressing problems of Black males in the areas of Education, Health, Criminal Justice and Employment” and “to serve as a catalyst to promote positive public and private remedies to the multi-faceted problems confronting Black males in our community and the resulting effects on the entire community.” The logic model of this section can be found in Appendix C, Figure C7.

In terms of the FY 18 budget, the commission makes efforts to coordinate the “Read for 200” campaign. They also organize events on “socially responsible activism”, “political and civic engagement” and “the importance of networking, race relations, self-esteem, healthy relationships, and strategies for personal and professional growth,” targeting students. The KPIs based on the FY 2018 budget should measure the recognition students have about the importance of healthy race relations. This criterion should be measured in the suggested school survey, and could be asked with a question that reads: “Do you think healthy race relations are important for personal and professional growth? Why or why not?”

Commission on the Status of Children and Youth

KPI	<ul style="list-style-type: none"> ● Percentage of youth who have contributed to other community members through volunteering or other providing assistance to faith communities, schools, area non-profits, friends, or neighbors
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The main activity of the Commission on Hispanic and Latino Affairs in the FY 2018 budget is to “recognize four area children and youth with SWAGGER awards.” The significant purpose of SWAGGER awards is to motivate children and youth to contribute to the community by awarding “students who have volunteered with their faith communities, schools, or area non-profits, assisted a friend or neighbor in need, mentored younger students, exemplified a positive attitude among peers, showed respect for others or improved academically.” While this current goal is a bit too narrow to be considered a KPI, the outcome of encouraging children and youth to be involved could be measured as KPI in a school survey. As an example, a school survey could ask: “Do you have an experience where you contributed to other community members such as faith communities, schools, area non-profits, friends, or neighbors by volunteering or offering assistance?” Additionally, the logic model of this section can be found in Appendix C, Figure C8.

Commission on the Status of Women

KPI	<ul style="list-style-type: none"> ● Percentage of female residents who are involved in community activities and initiatives ● Number of attendees who attend events recognizing women in leadership
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The main activity of the Commission on the Status of Women in the FY 2018 budget is to coordinate the 2018 Women’s History Month Lunch, Women of the Year Awards, and 2018 Women’s Leadership Development event. The significant purpose of these events are to motivate women to develop their leadership and be significantly engaged in the community. The KPI should be what measures this outcome and it can be supported through questions in a community survey. As an example, a community survey could ask: “Did you develop your leadership through involvement in volunteering and leadership roles in the community? Did you attend any events recognizing the achievement of women in the community?” Please reference the logic model for this commission in Appendix C, Figure C9.

Council for Community Accessibility

KPI	<ul style="list-style-type: none"> ● Number of facilities obtaining an AccessAbility decal in one year ● Percentage of residents who feel the public facilities of the City are accessible to all people
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The Council for Community Accessibility makes efforts to increase the number of businesses obtaining an AccessAbility decal with the FY 2018 budget. According to Director Calender-Anderson, the purpose of such an activity is to make the City accessible to all people, not only to those with disabilities. Due to the ambitious, important, and all-encompassing nature of this outcome, it should be measured as a KPI. This criterion should be measured in a community survey. As an example, a survey could ask: “Do you feel the public facilities of the City are accessible to all people? Which facilities are not accessible?” Please refer to the logic model for this commission in

Appendix C, Figure C10.

Dr. Martin Luther King Jr. Birthday Celebration Commission

KPI	<ul style="list-style-type: none">● Percentage of residents who have experienced racial injustice● Percentage of residents who feel that the City supports equal opportunity
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The Dr. Martin Luther King Jr. Birthday Celebration Commission promotes and celebrates Dr. Martin Luther King, Jr.'s birthday and promotes the appreciation of diversity in the community. The KPI of this section focuses on racial harmony in the City. While Diversity is a sub-department within CFRD that supports racial harmony, CFRD receives government funding and grants to support this commission and its objectives that aim to celebrate race and equity. These objectives could be measured in a community survey by asking: “Have you experienced racial injustice? If no, where do you think the City government could make efforts to support racial justice? Do you feel the City supports equal opportunity? If no, where do you feel unequal?” The logic model for this commission can be found in Appendix C, Figure C11.

CFRD Tracking Employee Time

As illustrated in the previous section, time is an essential resource. In this section we provide suggestions for assessing the relationship between time and activities. In our initial meeting with Deputy Mayor Mick Renneisen, he emphasized the importance of understanding where employee time was being spent. An understanding of how much time is spent on each CFRD project can help the Department and the City to prioritize projects in future budget cycles. To that end, we recommend that CFRD implement a formal system of tracking the time its employees spend on each project. We offer three options for implementing such a system.

First, CFRD could implement a real-time tracking system that asks employees to log time as it happens. Similar to a clock in/clock out system, employees would log when they begin working on a project and when they switch working to another project. This would allow the Department to quickly tally the total time spent on each project and determine how employees are spending their time. The Department could do this in as simple a way as an excel spreadsheet or could choose to implement an electronic system. The City already utilizes a timekeeping system to track project time in other departments. CFRD could easily utilize this system as well. If there is a need to move beyond this existing system, there are many software platforms that offer this capability, though most of them require a monthly payment. In Table 1, we include a pricing table to compare a few of these options. Note that this is not an exhaustive list; these are just a few of the options available.

Table 1: Software Platforms for Tracking Employee Time

Platform	Base Price	Price Per User	Annual Cost, 10 users
HubStaff	--	\$4.90/month	\$588
TSheets	\$16/month	\$4/month	\$672
FunctionFox	\$35/month, 1st user	\$5/month	\$960
AccountSight	--	\$9/month	\$1,080
Toggl	--	\$9/month	\$1,080

Second, if the Department deems real-time tracking too time-intensive or financially burdensome, the department could implement a time tracking system that simply requires a total time estimate for each project. When a project or event is completed, each staff member who contributed to the event would be required to submit an estimate of the number of hours they spent working on the project. This system would be less burdensome and less expensive, though would also be less precise due to its reliance on memory and estimation.

Finally, CFRD could integrate time management reports into its semi-monthly department meetings. Director Calender-Anderson explained to us that she meets with program directors twice per month to check in on progress. CFRD could adopt the practice of asking each program director to provide a written and oral report of time spent on each project since the previous meeting. This option would also be less burdensome and less expensive than the first option and would occur more frequently than the second option. However, it would also encounter the same problems as option two of relying on memory and estimation. Additionally, the department would eventually need to take the time to calculate total annual time or total time by project based upon these semi-monthly meetings.

CFRD has a number of options to begin tracking its time. It is important to note that these options are not mutually exclusive. CFRD could implement more than one of these options, or could utilize an entirely different method. The most important next step is to consider the Department's options and choose time tracking method with which to move forward. This will enable CFRD to better integrate time management with performance management.

Conclusion

At the first meeting, after asking Director Calender-Anderson the reason why the City has a unique department like CFRD, the Director advised that Bloomington historically places caring, compassion, and diversity as some of its top priorities. This tradition continues to contribute to the thriving image of Bloomington. The Department is currently facing similar challenges that other

cities across the country are facing in terms of attempting to measure the priorities mentioned above, but we consider them to be on par with the utilization of performance measurement techniques as it pertains to their programs and services. However, no matter the difficulty, CFRD should continue to make efforts to measure and monitor its performance and improve its accountability through transparency.

Housing & Neighborhood Development

Introduction and Scope

After the team’s initial meeting with Housing & Neighborhood Development (HAND) Director Doris Sims and Assistant Director Eric Saber, the team limited its project. The project in this report focuses on creating Key Performance Indicators (KPIs) for FY 2018 budget goals that can be used in the next City of Bloomington budget cycle. The team limited the number of goals identified in this report to four budgetary goals that are key indicators of performance in accomplishing HAND’s mission and strategic plan. As a note, an independent concurrent SPEA Capstone project focuses on Bloomington affordable housing. Therefore this Capstone team avoided redundant and inefficient work product by excluding HAND’s affordable housing program from its analysis.

Additionally, the HAND rental inspection and citation programs became the focal point for more in-depth analysis during this 12-week project. The team was able to meet with several HAND staff and members of the Information Technology (IT) department. Through these conversations, analyzing publically available data on Bloomington’s ‘B-clear’ data portal, and back office data, we provide various recommendations in the ‘Additional Recommendation’ section of this report.

FY 2018 Budget Goals

HAND is in the process of changing the time of year it creates the Department's budget from the Bloomington fiscal year cycle to the federal budget cycle. The City of Bloomington’s fiscal year coincides with the calendar year, January 1 - December 31, whereas the federal fiscal year is October 1 - September 31. This transition has just begun, headed by HAND Director Doris Sims. As a result, this team recommends that HAND separate budgetary goals that are directly funded by U.S. Housing and Urban Development (HUD) from goals appropriated through the City of Bloomington’s general fund.

FY 2019 Budget Goals Recommendations

Community Services	
FY18 Goal	FY19 Goal
Provide housing counseling services to 30 clients.	Provide 1:1 housing services to 30 income eligible clients that have not owned a home in the past X years.

In Community Services’ FY 2018 goal, the number of clients was based on the previous year’s performance, which is left unmentioned in the FY 2018 goal. Additionally, the current budget goal is not specific, relevant, or time bound. Utilizing SMART principles we recommend the budget

goal given to the City and HUD in the next budget cycle aim to be transparent specific rhetoric. Specifically, we propose the budget goal include a reference to the environment of such housing services and client eligibility. According to HAND, upon completion of the types of housing services HAND provides, clients are better able to handle rental and homeownership. HAND's housing services include four programs: (1) Home Buyers Club, a course offering participants a chance to explore possibilities of affordable homeownership; (2) Foreclosure Prevention Counseling; (3) Reverse Mortgage Counseling; and (4) Rental Counseling. To be eligible for the housing services, clients must meet income eligibility requirements and live within the geographic boundary of Monroe County. There are several ways to measure this budget goal because of the range of programs offered under the umbrella of housing services. In regards to housing services targeted at first-time home-buyer and home-retention, one way to numerically measure the goal's outcome is by the tracking the number of participants that do not fall into foreclosure after receiving services from HAND. Tracking participant outcomes can be tedious, but a necessary step in gathering performance data on the success of programs and corresponding goals.

First, HAND staff should begin manually entering various participant contact and housing status information into a new dataset before housing counseling. Information on participant's former housing status is critical for establishing baselines and trends that arise from these programs, especially since participants self-select to be in the program. According to HUD, 30% of participants that have not owned a home three years before housing counseling services participation, are less likely to fall into foreclosure three years after program completion. Years of not owning a home before the program is preferred because it is an objective measurement of first time home buyers or buyers that have been out of the housing market for an extended amount of time. In the example FY 2019 goal above, we recommend HAND determines the average number of years participants have not owned a home immediately before counseling to use as a baseline in a future budget goal. For this budget goal we recommend HAND create the following KPI as a baseline for measuring client participation. The KPI for the 1:1 counseling services would change over time and should be the average of an amount of time determined by the Department. Below is an achievable KPI after compiling and analysis participant data:

KPI	<ul style="list-style-type: none"> Number of years it will take that clients are at 30% less risk of future foreclosure following 1:1 counseling
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Using this measure, HAND can determine whether the housing counseling services are sufficiently assisting clients reliant on counseling services. Once eligible clientele is established, HAND can determine the total amount of housing counseling clients that avoided foreclosure within a period of time.¹⁷ Pointing to the individuals avoiding foreclosure is a KPI of HAND's impact on the Bloomington community. This impact may be more than the reported national percentage of 30% and valuable to the Department, Mayor's office, and public.

¹⁷ Although the team did not find sources determining an average time period it takes for first time home buyers suffer foreclosure, the team defers to the expertise of HAND staff in determining the appropriate standard that can be used as a benchmark.

Lastly, we wanted to note that staff coordinating the Home Buyers Club, should also begin to gather information on participants’ housing status and various methods for contacting participants in the future.¹⁸ Through this information, HAND can track participants, their property, and whether participants suffered foreclosure. The KPI for the Home Buyers Club may be similar to the KPI for 1:1 counseling. This would change over time and should be the average of an amount of time determined by the Department. Below is an achievable KPI after compiling and analysis participant data:

KPI	<ul style="list-style-type: none"> Percentage of less risk of future foreclosure after completing the Home Buyers Club program
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For consistency with the above recommendations, the team recommends HAND determine the program was “successful” when participants go beyond five years in their home.¹⁹ In other words, if the Home Buyers Club participants remain in their property for five years, without entering foreclosure proceedings or suffering foreclosure, then the program was successful.²⁰ However, if the foreclosure average is below five years, HAND should improve and promote a more “successful” program. This future “successful” measure will be a KPI of HAND’s impact on the participants and the community property value at large because of the steady increase in property value.

Historic Preservation	
FY18 Goal	FY19 Goal
Conduct a minimum of 10 Historic Reviews.	Conduct a review of a minimum of 10 small project applications from homeowners that live within local historic districts to support the Historic Preservation Commission.

The FY 2018 budget goal is to complete a minimum of 10 historic reviews at a staff level, opposed to reviewing property for historical designation. HAND staff’s Rachel Ellenson acts as the Department liaison and expert support to the Historic Preservation Committee. As liaison, Ellenson reviews applications for small and large projects at historically significant sites in the City of Bloomington. Small projects consist of painting color changes, tree removal, changes to sidewalks, patios, decks, or temporary structures. HAND is able to unilaterally approve small

¹⁸ Dependent on what the participant can provide, the contact information should include: phone numbers (home and cell), email address(es), and current place(s) of residence.

¹⁹ Again, this five year period is not supported by any source or stat because of unavailability. Therefore, the team defers to the expertise of HAND staff in determining the appropriate standard that can be used as a benchmark.

²⁰ This does not mean to suggest that curriculum cannot be improved after determining the curriculum was “successful.” Rather, this is the first step in establishing a valid KPI.

changes and provide consultation for large projects that go to the Commission for review. The application, called Certificate of Appropriateness Application, for projects only needs to be submitted by homeowners in local historic districts, not every Bloomington home-improve project.

Chosen applicants for review are based off of eligibility criteria -- i.e., they meet the local district specific guidelines. The district-specific guidelines are to ensure the intended project is compatible with the overall integrity of the district. We recommend the following KPIs to capture the completion rate in a palatable measure of days for staff, managers, the Mayor and public.

KPI	<ul style="list-style-type: none"> ● Percentage of small project reviews completed within X business days
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We recommend HAND establish a spreadsheet or database for the 10 districts located within the City. The database should contain contact details of each applicant within the respective local historic districts. Also, there should be various categories of intended projects (house painting, tree removal, decks, patios, and temporary structures), the date applications were received and the date reviews were completed.

Additionally, the historic reviews' FY 2018 goal focused on conducting a minimum of 10 historic reviews selected from homeowner applications. This implies that the FY 2018 goal may not specifically be based on the rate of clients served annually. Through conversations with HAND, we discovered staff received 3 or 4 applications every two weeks and 90 applications for small project reviews in FY 2017. Reasonably, we assume a large portion of those reviews were denied. It would be useful for HAND to keep track of all applications and the reason for denials to create a stricter evaluation and application criteria, specifically for local historic districts that do not have established rehabilitation guidelines. All projects that are approved follow distinct rehabilitation guidelines for that property's district. Currently there is not a guideline in all districts and HAND staff must refer to the U.S. Secretary of Interior's Standards for Rehabilitation. The federal standards apply a level of strict scrutiny that exceeds the local level. We recommend HAND identify the number of approved applications in which staff must apply the federal guidelines. Since the federal standards are often more strict than municipality standards, homeowners may bear the financial burden of trying to achieve the stricter standard. Knowing this number could support the need for all local historic districts to have guidelines, reduce inefficient work product, and save homeowners money during housing projects. Below is a suggested KPI to represent this measurement:

KPI	<ul style="list-style-type: none"> ● Percentage of all approved local district projects restored or rehabilitated to the federal level of scrutiny outlined by the Secretary of Interior's Standards for Rehabilitation
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Once HAND can implement the recommendation above, it will give a better understanding of the total number of projects, the most recurrent plan, and approved projects that do not have local historical guidelines to apply. Ultimately, this will help give a better understanding of the process and effectiveness of the historical reviews conducted in the local historic districts.

Housing Rehabilitation	
FY18 Goal	FY19 Goal
Complete 11 housing rehabs.	Complete 11 housing rehabilitations for income eligible owner-occupied clients living in single-detached residential buildings by the end of the program year.

The Owner Occupied Rehabilitation (OOR) program offers affordable financing to eligible homeowners in the City of Bloomington to make private property improvements. The program is initiated through an application process. Clients must satisfy the Department's financial agreement standards, and household income must be 80% or less of the Area Median Income (AMI), adjusted by household size (income limits are subject to change). The funds can be used to replace an aged roof, improve the foundation, put in a new energy efficient furnace, update a kitchen or bath, replace flooring, or any number of other items, which are critical to the health and safety of owner occupants as determined by the HAND staff coordinator. Allocations for HUD-funded programs are outlined in the City of Bloomington's Annual Action Plan submitted to and approved by HUD. ²¹Insufficient eligibility information that is not measurable or achievable is provided for the FY 2018 housing rehabilitation goal. Therefore, the team recommends that clients in single-detached residential buildings are preferred to narrow the scope of eligibility range.

Using the measure, HAND's trained coordinators are responsible for the fund distribution process, needs assessment, and process inspections. To maximize the available funds with the eligible clients, HAND's coordinator assesses the actual needs to optimize the housing rehabilitation fund. The coordinator has to be trained to identify the health and safety needs, necessities, and other eligibility factors of the applicants. Once the eligible clients are determined, the coordinator should take the following action steps:

1. Record the application process
2. Assess housing rehabilitation project need
3. Compute the completion ratio, below

$$\text{Total Number of Completed Applications} / \text{Total Number of Approved Applicants} = \text{Average Number of Clients Served}$$

In this Housing Rehabilitations' FY 2018 goal, the number of 11 is based on the FY 2017 completed housing rehabilitation projects. Our team identified Portland, Oregon and Austin, Texas as cities HAND can use as benchmarks when creating their housing rehabilitation budget goals. In particular

²¹ City of Bloomington, "Owner Occupied Rehabilitation Program, City of Bloomington, Indiana," accessed March 20, 2018, <https://bloomington.in.gov/housing/home-rehabilitation>.

Austin, Texas should be used as a primary benchmark because the City’s housing rehabilitation goal closely aligns with the City of Bloomington’s. At this time we have found no evidence to justify and recommend a specific number of housing rehabilitation projects to achieve in FY 2019. Therefore the team keeps the number of 11 as an FY 2019 goal.

Neighborhood & Citizen Involvement	
FY18 Goal	FY19 Goal
Complete 3 neighborhood cleanups per year.	Complete 3 neighborhood cleanups a year, expecting to total X tons of waste and X tons of recycling based on last year’s performance, while tracking the neighborhoods annually applying for and receiving cleanup financing.

Neighborhood & Citizen Involvement services includes three activities: (1) Neighborhood Improvement Grants, which provides neighborhoods a way to fund nontraditional neighborhood projects; (2) Small and Simple Grants, contributing \$500.00 or less to eligible neighborhood community building activities; and (3) Neighborhood Clean-Up Grants, which are aimed to “instill pride” within the neighborhood’s residents.

In Neighborhood & Citizen Involvement FY 2018 goal, the number of cleanups was based on the previous year’s performance. Further, the funding source for the 3 cleanups is split between two sources. HAND gets two neighborhood cleanup grants annually, and City Council funds the third cleanup through the general fund. At these neighborhood cleanups, HAND can count the number of tires removed, pounds of yard waste, and recyclables. These are all excellent KPIs to report to the public and should be included in the budget goals.

However, this goal is not entirely measurable because it fails to measure tangible evidence outside of cleanups. HAND has no control over who applied for cleanup financing but should track the number of neighborhoods that consistently apply and therefore benefit from this program. Gathering the data to create the following KPIs is essential to performance management and possible future outreach initiatives.

KPI	<ul style="list-style-type: none"> ● Number of neighborhoods that received funding in back-to-back years ● Number of neighborhoods that received funding more than once in one decade
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After a period of time,²² HAND can use this information to determine how effective neighborhood cleanups are for the community and how long the cleanups are maintained in different neighborhoods.

Program Analysis and Technology Recommendations

Over the course of the semester, the team worked with HAND to narrow the scope of the project. The goal of narrowing the scope was to give the team a fundamental understanding of what HAND does and how those processes could be improved. With HAND's input and guidance, the team decided to analyze the rental inspection and citations programs' data collection capabilities in uReport, the back side of uReport referred to as citation query and RentPro.

Rental Inspections

Rental inspections are carried out to certify rental occupancy. The initial process is the registration of property. This entails either filling out the registration form or calling the office to fix a date for filling out the form. The next step is the inspection process. This process requires that either the manager of the property, the maintenance individual, tenant, or other persons of authority must be present with the staff inspector at the time of inspection.

During the rental inspection process, there are both internal and external inspections of the property. A report that shows the necessary repairs is then generated about 1 to 2 weeks after completion of a review. A timeframe of 60 days is given for completion of all repairs, while one year is provided for the completion of selected exterior violations.

After the completion of necessary repairs, there is scheduling of reinspection. Referring to the inspection report, the inspector ensures that the repairs made to the property meet the code standards. If there isn't total compliance seen during the initial reinspection, it is then mandatory that the property is rechecked until it shows full compliance with the code standards-there is a bill of \$70 charged for each extra reinspection that is required after the first reinspection.

On the other hand if there is full compliance seen at the time of reinspection, a permit or inspection fee is then generated. Once payments are completed, there is the issuance of either 3, 4, or 5 years rental occupancy permit.

The reporting of rental inspections is initially written either on a blank sheet of paper or is inputted into an iPad. The information is then typed manually into RentPro. RentPro is the rental processing system, which is an in-house program used to track rental inspections. There is a file number generated for the first inspection. When reinspection of the same property is carried out, another file number is generated for the same property. This implies the RentPro system has multiple file numbers generated for the same building inspections - i.e., inspections and re-inspections.

Regarding the data involved, RentPro maintains detailed information of each inspection issue including permit verification, location address, agent or owner information, property status, and bill

²² The team defers specific timing to HAND, but recommends three to five years.

number. For example, under the rental search function, it needs the user to input the location address, owner or agent information, and bill number or other information such as if the search item is registered, issued, or expire to process specific search with accuracy. To narrow the search scope, users can limit the time range from the date to date. Meanwhile, RentPro supports the statistic report by searching within a data range from week or month to select from options such as a count of permits per agent or number of permits per owner.

After determining the scope, the team walked through the rental inspection process with HAND staff. The Capstone team identified a couple of issues within the rental inspection process in regards to performance measurements and efficiency.

Another file number is generated for the same rental property after the second inspection. Thus, the same property will receive two separate numbers, even when both inspections are related to the same complaint or matter, causing inconsistency in the reporting system for rental inspection. Moreover, multiple file numbers make it difficult to track inspections carried out and completed on any specific property without combing through data.

Regarding these filing issues, the team recommends HAND institute or establish a system, software, or process that maintains consistent file numbers for the same rental property. This affords HAND officials to increase performance efficiency through user-friendly features and consistent file keeping.

In addition to the software and file keeping update, HAND's officials could increase productivity through improving iPad accessibility. Currently, iPads without a data plan can only access software and rental inspection forms through taking a screenshot of the necessary information. This means HAND inspectors are forced to handwrite the inspection report, even if they have an iPad, and then update the inspection report when they can access WiFi. As a result, the team recommends the iPad software receive an upgrade. For the change to be worthwhile, it should allow HAND inspectors to temporarily save work and inspection forms on the iPad, in an offline mode, while inspecting rental properties and then upload that file to the server when reaching WiFi signal.

In reaching these recommendations, the team is confident that HAND will increase work product, work quality, performance efficiency and measurement.

Citations

Several departments, including HAND do the citation process. Common issues HAND responses to are complaints regarding yard waste, trash can removal, and more. The Department becomes aware of a claim through several mechanisms. Claims may be called in by phone, email, in person at City Hall, uReport, or when a HAND inspector is driving through the community while on duty. There are several inspectors responsible for writing warning or violation citations.

Upon arriving at a complaint location, inspectors can write a citation for violations as a warning, first, second, or third offense. After the third offense, if a violation is still not addressed by the property owner, then HAND refers the citation for legal action to another department. There are fines associated with first, second, and third violations, but the amount of the penalty differs

between citation categories. HAND citation fines range from \$15 to \$150 depending on the type and number of recurring offenses in the Bloomington rental cycle year. As a transient college town, the rental cycle is August 1 - July 31. On August 1, properties expect to be given a clean slate, so citations do not add up to substantial fines for existing tenants or unjustly punish new rental tenants for previous tenants' failures in the past rental year.

In the field, inspectors fill out a carbon copy paper violation. The top copy is left at a residence, and the bottom copy is brought back to the office. While onsite, inspectors cannot fill in the homeowner information. This must be done back at the office. The information is then duplicated so that the carbon copy can be filed away in the office and the duplicate is mailed to the residence. The team recommends that HAND begin scanning and saving issued warnings and citations into its electronic file. This step will decrease the reliance on paper files, minimize the time wasted on locating paper citations and ease HAND's transition to a purely electronic filing system.

With the citation process in mind, the team reviewed publically available data and a dataset the Department accesses to see valuable complaint information. We ran into a few significant gaps in data that hindered the depth of analysis this project could reach. First, in the dataset, we attempted to calculate the number of claims that resulted in three coinciding citations. This is possible in HAND's citation query through filtering (See Appendix D, Figure D1), but not enough criteria can be selected so we utilized raw data for analysis. We wanted to connect multiple citations (warning, first, second, third, deferred) with a single address and open/close date for each subsequent fine after the first. In our approach, we intended to measure the real time it took to close different categories of offenses, the percentage of third-round citations Department staff handle, and the average number of violations that ultimately were deferred to the City's legal department for action. However, this was impossible because of gaps in the dataset, mislabeling, and differences in the citation number from uReport and what is listed on the citation form in the field.

All written citations have a claim number in the citation query generated in part by uReport, and a citation number on the paper form. See Appendix D, Figure D2 and Figure D3 for a comparison of the claim/case/citation number differences entered as data in HAND. The claim numbers, citation numbers and service request numbers are all different but should be the same for data tracking purposes. The team was unable to link multiple back-to-back citations due to this data configuration issue.

Additionally, the 'source' column on the dataset utilized (See Appendix D, Figure D3) often stated 'other' as the case source. A case source would typically be a phone call, walk-in, email, uReport claim, or noticed by Inspector. The team believes 'other' may be appearing on the data set as a result of human and technology error. First, staff may be entering the source field incorrectly or not entering it at all. Second, the system may be defaulting empty source fields as 'other.' Upon discussing the possibilities with the department we could not pinpoint the error, but it is reasonable to presume that it is both human and technology mistakes. We recommend HAND work with the IT department to request the source field be changed to a required field and HAND retrain entry of citations with a focus on attention to detail for the sake of performance measurement.

Although the Department has acquired several iPads the citation query used in the office to mark complaints as closed, there are several issues with using the iPad in the field. First, the iPads are only WiFi enabled and cannot pull up homeowner information to fill out paperwork onsite or see if the citation should be first, second or third time fine. Inspectors must pull up claims on the back end citation query at City Hall when connected to the City server. See Appendix D, Figure D4 for a screenshot of this interface. The iPads must be synced to the server to display such data and also display the homeowner's information. Many properties in Bloomington are rentals, and the homeowner does not reside in the house. Moreover, the iPads are not able to access RentPro outside of City Hall. Inspectors use RentPro to look up the homeowner addresses before filing the carbon copy of the citation form and mailing a duplicate to the residence. As a courtesy, the Department will fine tenants, not homeowners, at rental properties. Homeowners or managing agents provide tenant information to HAND at the beginning of the rental cycle, but doing so is not a HAND requirement.

The team recommends HAND begin gathering and tracking tenant information from landlord's at inspection and at the "reset date" of August 1.²³ Although the team recognizes collecting tenant information may be difficult in practice, it would allow HAND to know which tenants should receive a "full reset" or a "partial reset" on August 1.²⁴ However, knowing which reset a tenant should receive will be dependent on HAND's ability to collect tenant information from homeowners.²⁵

The team's recommendations focused on developing a consistent and efficient transition into the inevitable electronic process that HAND is working toward. The team recommends funding for HAND to improve its data collection and integration capabilities - both in the office and in the field.

Conclusion

The next step for HAND is to rewrite their budget goals using SMART principles and create KPIs. In ensuring the efficiency and effectiveness of goals, it is essential for HAND to develop key performance indicators. Both will act as benchmarks in assuring budget goals are transparent to the Mayor's office, City Council, and the public. Additionally, we recommend HAND staff receives Trello training to actualize all the benefits entirely. The Department should start adding SMART goals into the Department's Trello board. Each SMART goal should be a Trello card and in the description of the card, list all relevant KPIs. Trello cards also have an action item feature that can be checked upon completion and shows who completed the action. To ease the Trello transition, Staff should familiarize themselves with shortcuts such as 'Shift-Q' to collapse cards and see the entire board. Starting to use Trello for goal tracking will help facilitate its integration into a performance dashboard. In the long-term, HAND should work with the IT Department to integrate

²³ Perhaps Bloomington should rethink this "reset date" process because it allows renewed tenants to receive citation forgiveness on August 1.

²⁴ "Full reset" is when, on or after August 1, a new tenant owns the property and should receive a warning rather than being forced to pay for the prior tenant's violations. In contrast, a "partial reset" is when, on or after August 1, the same tenant owns the property and should continue to receive citations for continued violations.

²⁵ Again, the team understands this data collection might be cumbersome on many parties, so this may not be feasible until all landlords have transitioned to electronic process.

several reporting systems and close data gaps. The integration of technological systems will reduce the time taken to input data and improve performance management.

Planning & Transportation

Introduction and Scope

The Department of Planning and Transportation (DOPT) has a wide range of goals and objectives. Three Divisions of the Department are addressed within our scope: Development Services, Planning Services, and Transportation and Traffic Services. In Transportation and Traffic, DOPT plans to implement infrastructure projects related to roads, sidewalks, and bridges. Planning designs and implements studies to collect data. Transportation and Planning data are used to guide other DOPT operations such as zoning and land usage. DOPT also issues permits for construction and development projects through the Planning Division. Additionally, DOPT regulates areas of the City through zoning.

DOPT enforces various regulations regarding construction and development projects, issues citations to those in violation of its regulations and rules, and evaluates development projects that are proposed to the city. Although some projects are approved on the first review, many projects require changes before receiving DOPT approval. The Development Division focuses on designing and guiding environmental and sustainability policies.

The team's primary focus for this project is to improve performance measurement practices to increase Department performance, productivity, and efficiency. For this report, the team rewrote many goals and transformed them into SMART goals. Additionally, the group proposed new goals for 2019 and introduced Key Performance Indicators (KPIs) to promote productive work product. These KPIs are designed to measure activities that have a substantial impact on DOPT's performance and results.

In going through the 2018 Comprehensive Plan, we selected goals that are achievable in the short-term and well defined under the SMART principles. The KPIs are tracked based on the chosen goals and are useful in monitoring the progress towards the goals. KPIs also provides room for improvement by facilitating comparisons internally and externally. Internally, DOPT can conduct historical comparisons on its own to track achievements or make improvements. Externally, the Department can compare its data with similar cities such as Austin, Texas and Ann Arbor, Michigan.

Existing Issues Overview

The team had two meetings with various members of the Department, in which DOPT staff identified some problems that limit the Department's effectiveness and efficiency. Many outcomes go unmeasured. What data currently measured are efficiently used to convey performance. Many of the Department goals are nonspecific and are not designed to improve productivity. The team also analyzed performance measurement practices and technological innovation utilized in other cities. The team worked to establish and organize baseline data to help form KPIs to serve as guides for improved performance.

First, the DOPT needs a standardized instrument to track performance as well as progress efficiently. The Department uses Excel on a case by case basis to track development petitions and the permitting process such as housing projects, rehabilitation, and business movement. The Monroe County's Building Department, which is within the permitting process, may take a lot of time to track progress because the primary communication between these two Departments is through paperwork. Trello is used to manage the budget goals for the Department, but it cannot generate data and numbers like Microsoft Excel. DOPT also needs a standardized tool for internal communication and task tracking. The staff often estimate the progress of the project. Department members informed us they do not have time to devote to measure performance due to their busy schedules.

Second, the feedback from quality-of-service ratings is not integrated into the performance measurements of the DOPT. The current feedback system is a "thumb up or down" machine that is placed in front of the reception desk of the Department. This means that citizens can only give a rating of good or bad to the general quality of the Department's services, which is unfocused regarding particular divisions in the DOPT. Citizens cannot give more specific feedback. Moreover, many members of the public are likely unaware of this feedback mechanism. Even if members of the public do know of this machine, they may be unlikely to give feedback due to the inconvenience of having to travel to provide this feedback and the lack of specific feedback

Third, several goals in the FY 2018 budget should be revised following SMART principles to promote transparency.

FY 2018 Budget Goals

Ideally, the goals in the City's Master Plan, Departmental Budget Memo, policies of the Department, measurements in the City open data files, and KPIs to evaluate and review department work would be aligned. The team strived to establish clear connections between these data, but found missing links in the current system. The team proposes new simplified budget goals that are a combination existing Department goals from the FY 2018 budget and goals not currently addressed by the department. The team suggests DOPT adopt appropriate KPIs to make sure the policies and Departmental projects are on track and the performance criteria. The KPIs should be presented in ways that efficiently communicate outcomes. For example, changing the Department's approach to goal setting will better communicate departmental performance to the Mayor's office, City Council, and the public.

FY 2018 Revised Budget Goals Recommendations

We propose to revise the goals for 2018 in accordance with the SMART principles. We felt some of the FY 2018 budget goals of DOPT should be revised to better guide and promote effective Department performance before we recommended FY 2019 budget goals. The tables below illustrate the goals of FY 2018, recommendations on revised goals, and explanations of the problems of the current goals and the recommendations. We revised goals to make them more clear, measurable, focused, and to have more specific objectives.

When viewing the goals in the tables below, it is important to note many tables include more than one goal on either side.

Unified Development Ordinance	
FY18 Goal	Revised FY 18 Goal
<p>Plan Commission, City Council and Administration will consider updates to high-priority sections of the UDO by the end of the first quarter of 2018. High priority sections include but are not limited to Downtown development and Land Use.</p> <p>Plan Commission, City Council and Administration will consider the fully updated UDO by the end of the third quarter of 2018.</p>	<p>Complete and submit all updates to the UDO to the Plan Commission by the beginning of the third quarter of 2018.</p>

The DOPT should describe its goals with more specificity. For instance, “complete by” and “adopt by” are more measurable and specific than “consider.” The KPIs are employed to allow breakdown of tasks and enhance their trackability and measurability.

KPI	<ul style="list-style-type: none"> • Percentage completed of the updates of the entire UDO
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Master Thoroughfare Plan / Transportation Plan	
FY18 Goal	Revised FY 18 Goal
<p>Plan Commission, Common Council and Administration will consider the completed document by the end of the second quarter of 2018.</p> <p>Document will be guided by the goals and policies established in the new Comprehensive Plan.</p>	<p>Complete and submit the Master Thoroughfare Plan with updated Bicycle and Pedestrian Transportation and Greenways System Plan by the end of second quarter of 2018.</p>

The problem with the goals above remains the confusion between goals and performance indicators. They do not clearly show the specific tasks of the Department. Indicating how the document will be guided to the goal is unnecessary. The following KPIs should be monitored to measure the progress of this goal.

KPI	<ul style="list-style-type: none"> ● Number of chapters or provisions completed of the first draft of the Master Thoroughfare Plan by the first quarter of the 2018 ● Percentage of completion of the Master Thoroughfare Plan by the end of second quarter of 2018
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ArcGIS Software	
FY18 Goal	Revised FY 18 Goal
<p>Establish baseline data for the many activities and goals detailed in the new Comprehensive Plan that are part of P & T's workload.</p> <p>Regularly (monthly or quarterly) report metrics that measure goal progress to the Administration and the public.</p> <p>Provide training to P & T staff in order to fully utilize this essential tool.</p>	<p>Utilize ArcGIS Software to improve Department's data management and analysis works by establishing baseline data to activities and goals indicated in the 2018 Comprehensive Plan.</p> <p>Set regular reporting mechanism to measure goal progress and require all responsible DOPT staff use the tool effectively by the end of 2018.</p>

This set of goals did not set a specific timeframe for when each goal should be achieved. The goals are not descriptive and do not offer specific tasks to be completed by the staff. To track the progress of this goal, the KPIs that should be used are:

KPI	<ul style="list-style-type: none"> ● Number of activities and goals from the Comprehensive Plan that baseline data are established ● Number of training programs on ArcGIS software provided ● Number of required staff trainings on how to use the ArcGIS software
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Additionally, the percentage of required metrics which need to be set up that is reported monthly to the Mayor and the public should be utilized for performance measurement.

Affordable Housing	
FY18 Goal	Revised FY 18 Goal
<p>90% of multifamily housing developers who file their projects through the Planning and Transportation Dept. will be offered the opportunity to voluntarily include affordable housing units in their projects, contribute to the City’s Affordable Housing Fund, or propose a combination of these options.</p> <p>Collaborate with HAND and ESD to generate semi-annual reports on the numbers, locations sizes and amount of investment for new affordable units.</p>	<p>Increase the volume by X affordable housing units by collaborating with HAND, ESD, Common Council, and the Administration to encourage voluntary activities from the community.</p>

The goals are not relevant to the desired outcome, which is “to increase the volume of affordable/workforce housing units in the City.” The goals should be more result oriented. In particular, the goals should include developing a plan to encourage multifamily housing developers to provide affordable housing units. The team recommends collecting data to produce the following three KPIs:

KPI	<ul style="list-style-type: none"> ● Number of affordable housing units offered by multifamily housing developers ● Cost to the City for expanding affordable/workforce housing ● Cost to the City per unit of affordable housing
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Planning Services	
FY18 Goal	Revised FY 18 Goal
Data regarding traffic counts, studies and other research will be available to the public by the end of the 2 nd quarter of 2018. The Planning Services team will hold a minimum of two special events to encourage and increase bike ridership in the City.	Create and publish data regarding traffic counts and bicycle ridership. Plan and hold at least two community events that encouraging bicycle ridership.

The Department’s goals have no specific targeted amount on the increase of bike ridership. The City has improved its transportation network to better accommodate people on bicycles and increase bicycling benefits, such as reduction of traffic congestion and improvement of health. The following KPIs would track bike ridership in Bloomington.

KPI	<ul style="list-style-type: none"> ● Percentage of people regularly using bicycles ● Number of people who attend bicycle promotion events
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FY 2019 Budget Goals Recommendations

The design of goals and KPIs for the DOPT in FY 2019 begins by applying the SMART principles, which are specific, measurable, attainable, relevant, and timely.

Second, the goals were developed from two sources: either the FY 2018 Budget goals or the 2018 Comprehensive Plan. For the goals developed from the FY 2018 Budget, the team identified elements that will need to be followed up and extended to FY 2019. These goals are designed to be SMART and were chosen because they are short-term and specific. We matched these new goals with SMART principles and set relevant targets and KPIs to be included in the FY 2019 Budget goals.

Of note, the proposed goals and KPIs are not limited to what is listed below. These goals and KPIs are examples of future budget goals. The goals below are proposed because they are directly related to the success and achievement of the Department. Another important issue in the forming of these goals is that the substance of these goals was not amended from that in the original budget goals so the general objectives remained similar to what they were before.

From FY 2018 Budget Goals

The first set of goals recur annually in the budget and are developed from the team’s revisions of the FY 2018 budget goals. The left column is the revised FY 2018 budget goal(s) and the right column is the recommended FY 2019 budget goal(s).

Master Thoroughfare Plan	
FY18 Goal	FY19 Goal
Complete and adopt the Master Thoroughfare Plan with updated Bicycle and Pedestrian Transportation and Greenways System Plan by the end of second quarter of 2018.	<ol style="list-style-type: none"> 1. Set timeline on the plans on context and the multimodal transportation modes specified in the Master Thoroughfare Plan by the end of first quarter of 2019. 2. Implement plans on context and the multimodal transportation modes by the end of 2019.

The Department should implement the projects specified in the Master Thoroughfare Plan that was in the 2018 policies which is part of the 2018 Comprehensive Plan for the City of Bloomington. The key areas in the Master Thoroughfare Plan are context and the multimodal transportation modes. The progress of the goal can be measured by the following KPIs:

KPI	<ul style="list-style-type: none"> ● Percentage of completion of timeline created for plans on context and multimodal transportation modes ● Percentage of completion of plans on context and multimodal transportation modes
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ArcGIS Software	
FY18 Goal	FY19 Goal
Utilize ArcGIS Software to improve Department's data management and analysis works by establishing baseline data to activities and goals indicated in the 2018 Comprehensive Plan, setting regular reporting mechanism to measure the goal achievement progress and all responsible DOPT staff can use the tool effectively by the end of 2018.	<ol style="list-style-type: none"> 1. Increase the amount of data on vehicle and pedestrian flow collected by the ArcGIS software per month by 20% in 2019 compared to 2018. 2. Increase the number of hours of traffic data collected by 20% in 2019 compared to 2018. 3. Increase the number of traffic locations analyzed by 30% in 2019 compared to 2018.

In 2018, the DOPT worked to improve its staffs' ability and skills in ArcGIS software. In 2019, the Department should focus on utilizing this software for data collection and on collecting more data for Department usage. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Rate of vehicle flow at major intersections per month as seen in ArcGIS ● Rate of pedestrian flow at major intersections per month as seen in ArcGIS ● Number of traffic locations analyzed in one year ● Number of hours of traffic data collected in one year
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Affordable Housing	
FY18 Goal	FY19 Goal
Make effort to increase the volume by X affordable housing units by collaborating with HAND, ESD, Common Council, and the Administration to encourage voluntary activities from the community.	Increase the number of affordable housing units for low-income households generated by the collaboration with multi-family housing developers by 60 by the end of 2019.

Regarding affordable housing, the Department should follow up the incentives created by the Department and external bodies. Thirty affordable housing units were created in a 6-month timespan in 2017, so the goal is to produce 60 affordable housing units for low-income households in 2019. The progress of the goal can be measured by the following KPI:

KPI	<ul style="list-style-type: none"> ● Number of new affordable housing units for low-income households included in multifamily housing developer projects
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Development Services	
FY18 Goal	FY19 Goal
<p>A minimum of 35 cases will be heard by the Plan Commission for review/approval, each case will be solved within 20 days.</p> <p>Present a minimum of 25 Environmental Review Memos to the Plan Commission in 2018.</p> <p>Resolve 85% of uReport complaints and code violations through zoning enforcement efforts in 2018.</p>	<ol style="list-style-type: none"> 1. Submit X% of all proposed zoning to the Plan Commission for review/approval within Y working days of a completed application. 2. Submit Environmental Review Memos to the Plan Commission within X working days of receipt of a completed application in 2019. 3. Resolve 85% of uReport complaints and code violations within X working days.

The Department should further increase the efficiency and cost-effectiveness in reviewing development petitions, rezoning requests, and handling complaints. Meanwhile, the Department should measure the average time to process petitions and project reviews and should try to improve this result over time by setting more ambitious goals in the future. For instance, the average time taken to process proposed zoning cases are calculated as:

$$\text{Sum of total number of working days taken to process all proposed zoning cases} / \text{Total number of proposed zoning cases} = \text{Average time taken to process proposed zoning cases}$$

In each measurement, the time unit of “days” in 2018 goals is replaced with “working days” in 2019 goals to make the target more realistic and attainable. The KPIs are as below.

KPI	<ul style="list-style-type: none"> ● Percentage of cases of proposed zoning submitted to the Plan Commission within X working days ● Number of Environmental Review Memos submitted to the Plan Commission within X working days ● Percentage of uReport complaints and code violations resolved within X working days ● Average time taken to process proposed zoning cases ● Average time taken to process Environmental Review Memos ● Average time taken to process uReport complaints and code violations
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17th Street Construction	
FY18 Goal	FY19 Goal
Complete and adopt the 17th Street Reconstruction Design and Plan by the end of 2018.	Complete the 17th Street Reconstruction Project by the third quarter of 2019.

Regarding the 17th Street Reconstruction Project, the reconstruction design will be finalized in 2018. The Department should complete this project by the third quarter of 2019. The relevant KPI is below.

KPI	<ul style="list-style-type: none"> Percentage of completion of the 17th Street Construction Project
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Sidewalk Project Design	
FY18 Goal	FY19 Goal
Collaborate with the City Council Sidewalk Committee and implement the Committee’s direction in relation to sidewalk project design, right-of-way acquisition, and construction.	<ol style="list-style-type: none"> Complete the recommended sidewalk projects design by the second quarter of 2019. Complete the right-of-way (ROW) acquisition for sidewalk projects the fourth quarter of 2019. Prepare final specifications for sidewalk construction of approved projects within X days of approval.

The Department is to generate designs and to submit to the Commissions for consideration, including the sidewalk project design that is in the 2018 Comprehensive Master Plan. To facilitate the implementation of the sidewalk project design, the Department should complete the design, complete right-of-way (ROW) acquisition, and prepare final specifications. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> Percentage of completion of sidewalk project design Percentage of completion of the ROW acquisition Percentage of completion of the final specifications for sidewalk construction
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Planning Services	
FY18 Goal	FY19 Goal
<p>Create and publish data regarding traffic counts and bicycle ridership.</p> <p>The Planning Services team will plan and hold at least two events with the purpose of encouraging bicycle ridership.</p>	<p>Increase the percentage of people who bike to work by X% from 2018 to 2019.</p> <p>Set timeline for the subarea plans created in 2018 by the end of second quarter in 2019.</p>

To follow up the subarea plans created in 2018, the Department should set timeline for these plans to be implemented. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Percentage of people using bicycles ● Number of subarea plans created in 2018 is set with timeline
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Reorganizing Departmental Duties	
FY18 Goal	FY19 Goal
<p>Establish methodology for evaluating the benefits and costs of an additional department</p>	<p>Present to the Mayor a proposal for the addition of a separate Building Department by the end of first quarter of 2019.</p>

The last goal from the FY 2018 budget goals we looked is on the possible formation of a separate Building Department, to reorganize departmental duties and enhance departmental efficiency. The relevant KPI is below.

KPI	<ul style="list-style-type: none"> ● Completion of the proposal for the addition of a separate Building Department
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From 2018 Comprehensive Plan

The second set of goals is from the 2018 Comprehensive Plan, that matched the mission of the Department, and is relevant to the achievement of Departmental goals and objectives.

Multimodal Transportation System	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Increase the number of seating, lighting, and signage at transit stops. 2. Increase the number of benches, pedestrian-scaled lighting, and bicycle parking units created and expanded. 3. Reduce the number of citizen complaints on problems with public transit. 	<ol style="list-style-type: none"> 1. Increase the number of seats, lighting, and signage at transit stops by X% by the end of 2019. 2. Increase the number of benches, pedestrian-scaled lighting, and bicycle parking units created and expanded in 2019 by X%. 3. Reduce the number of citizen complaints on public transit by X% in 2019

The first goal is from the comprehensive plan to improve the multimodal transportation system by maintaining, developing, and expanding the public transportation system with accessibility, safety, and efficiency. Increasing the number of facilities for public transit and bicycle users can support the growth of the Multimodal Transportation System. Overall, the Department should aim at improving citizen satisfaction on the transit system, as reflected by the number of complaints on public transit. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Number of seating, lighting, and signage at transit stops added ● Number of benches, pedestrian-scaled lighting, and bicycle parking units added ● Number of citizen complaints on public transit
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Bicycle-friendly Community	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Increase the number of people who bike to work. 2. Increase the number of local area bicycle route maps provided to the citizens. 	<ol style="list-style-type: none"> 1. Increase the percentage of people who bike to work in 2019 by X%. 2. Increase the number of local area bicycle route maps provided to the citizens in 2019 by X.

The second goal is to promote a bicycle-friendly community. To achieve this goal, the Department will have to upgrade the infrastructure as listed in “Multimodal Transportation System” above to promote bike use, and provide more local area bicycle route maps to encourage citizens to ride bikes as leisure activities. Relevant KPIs are below. The specific numbers used in the goals will be based on current data to try to improve the results going forward, including the KPIs below.

KPI	<ul style="list-style-type: none"> ● Percentage of people who bike ● Number of local area bicycle route maps provided to the citizens
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Traffic Safety	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Increase the number of traffic calming measures. 2. Reduce the number of speeding cases. 3. Reduce the motor vehicle crash rates. 4. Reduce the number of fatalities and incapacitating injuries. 	<ol style="list-style-type: none"> 1. Increase the number of traffic calming measures implemented in residential neighborhoods by X% in 2019. 2. Reduce the number of speeding cases in 2019 by X%. 3. Reduce the motor vehicle crash rates in 2019 by X%. 4. Reduce the number of fatalities and incapacitating injuries in 2019 by X%.

The third goal is on Traffic Safety. To achieve this goal, the Department should introduce more traffic calming measures in residential neighborhoods to enhance safety in populated regions. The

Department should also aim at fewer speeding cases, lower motor vehicle crash rates, and fewer number of fatalities and incapacitating injuries. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Number of traffic calming measures introduced in residential neighborhoods ● Number of speeding cases ● Motor vehicle crash rates ● Number of fatalities and incapacitating injuries
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Optimization of Parking in Public Space	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Complete the new Plan of Parking in Public Spaces. 2. Introduce more new parking spaces. 	<ol style="list-style-type: none"> 1. Complete the new <i>Plan of Parking in Public Spaces</i> by the end of first quarter of 2019. 2. Introduce X additional public parking spaces by the end of 2019.

The fourth goal is the optimization of parking in public spaces. Parking in public spaces needed a new plan in 2019, with the introduction of more public parking spaces. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Percentage of completion of the plan of parking in public spaces ● Number of parking spaces introduced in 2019
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Public Education on Road Safety	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Increase the amount of education sessions promoting right-of-way safety. 2. Increase the number of flyers distributed. 	<ol style="list-style-type: none"> 1. Increase the amount of educational events promoting right-of-way safety in 2019 by X. 2. Increase the number of electronic safety guidelines published in 2019 by X.

The fifth goal is Public Education on Road Safety. The Department will educate drivers, bicyclists, and pedestrians on right-of-way and traffic-safety practices. The relevant activities are educational events promoting right-of-way safety and electronic safety guidelines. The relevant KPIs are below.

KPI	<ul style="list-style-type: none"> ● Number of electronic safety guidelines on right-of-way ● Number of educational events promoting right of way safety
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Land Use by Private Entities	
FY18 Goal	FY19 Goal
<ol style="list-style-type: none"> 1. Increase the number of multimodal infrastructure projects from private entities reviewed by the Commissions. 2. Reduce the average time to review proposals. 	<ol style="list-style-type: none"> 1. Increase the number of multimodal infrastructure projects from private entities reviewed by the Commissions in 2019 by 10%. 2. Reduce the average time to review proposals in 2019 by 10%.

The sixth, which is the last goal, relates to land use by private entities. The Department should increase the efficiency of reviewing local multimodal infrastructure projects from private entities. The relevant KPIs are the number of multimodal infrastructure projects from private entities reviewed by the Plan Commission in 2019 and the average time taken to review proposals as assorted by the size of infrastructure projects.

Additional Recommendations

The Department should collect more data with regards to KPIs in order to more effectively evaluate department performance and identify areas that performance is lacking. The Department should evaluate the data regularly (at least monthly). Ideally, data should be relatively easy to measure and should clearly measure KPIs so that performance can be improved.

Conclusion

The recommendations to the Department of Planning and Transportation are meant to serve as guidelines for the Department moving forward. SMART budget goals should be designed to be clear, concise, easily understandable, time-bound and measurable. KPIs should be the measures that best informs the Mayor and the public of the significant impacts the Department has on the community.

Public Works

Introduction and Scope

The Department of Public Works' mission is to provide essential infrastructure, services, and operations that are performed in a prompt, courteous, safe, efficient, and cost-effective manner. Based on the expectations of the Mayor's Office and discussion with Public Works Director Adam Wason, the team selected four out of the seven Divisions of the Public Works Department to help improve performance measurement—Animal Care and Control, Fleet Maintenance, Sanitation, and Street Operations. For each Division, the Capstone team: (1) Revised FY 2018 budget goals; and (2) Developed action steps for key performance indicators (KPIs) for the FY 2019 budget.

In particular, all goal edits and proposed recommendations aim to follow the SMART principles, with additional research from the success of other cities and some academic references. Additionally, Key Performance Indicators (KPIs) are defined and measured as part of the FY 2019 budget recommendations for each Division. This report is designed for both external and internal uses, with recommendations established and divided for two purposes: Primary Goals intended for external stakeholders of the Department such as the Mayor's Office and the public, and action steps and Additional Goals for internal use by the Department Director and Division heads to aid in regularly assessing Public Works' performance.

The approach in deciding on recommended FY 2019 goals was based on (1) analysis of data from the 2018 Budget Goals; (2) performance trends for years 2014-2017; (3) the FY 2017 City of Bloomington Community Survey; (4) research from other cities and; (5) professional organizations and academic research. The team's methodology was to condense a long list of division goals into three of the most important goals for each division. From there, we organized each division's goals into Primary Goals—or those that are externally-focused and of greater concern to the Mayor's Office and the public—and Additional Goals that are internally-focused. Internally-focused goals are those that the Public Works division heads can track to ensure internal performance accountability of outcomes.

What is a Primary Goal? This is the goal that directly affects the efficiency and output/outcome of the Department. This could be an important or dangerous concern that the Department faces currently and needs to improve as soon as possible. These goals are designed to meet the expectations of output/outcomes of the Mayor's office or citizens to enhance departmental performance. As stated previously, these primary goals should follow SMART principles. Along with each primary goal is a KPI and action steps. This approach offers a logical process of action steps to assist Divisions to achieve the primary goals.

What is a KPI? As explored in the previous chapters, a KPI is a measurable value that usually begins with a word such as "number of", "percent of", "ratio of", "incidence of," "proportion of," or similar phrases. However, KPIs do not describe the big picture of the Department but instead show

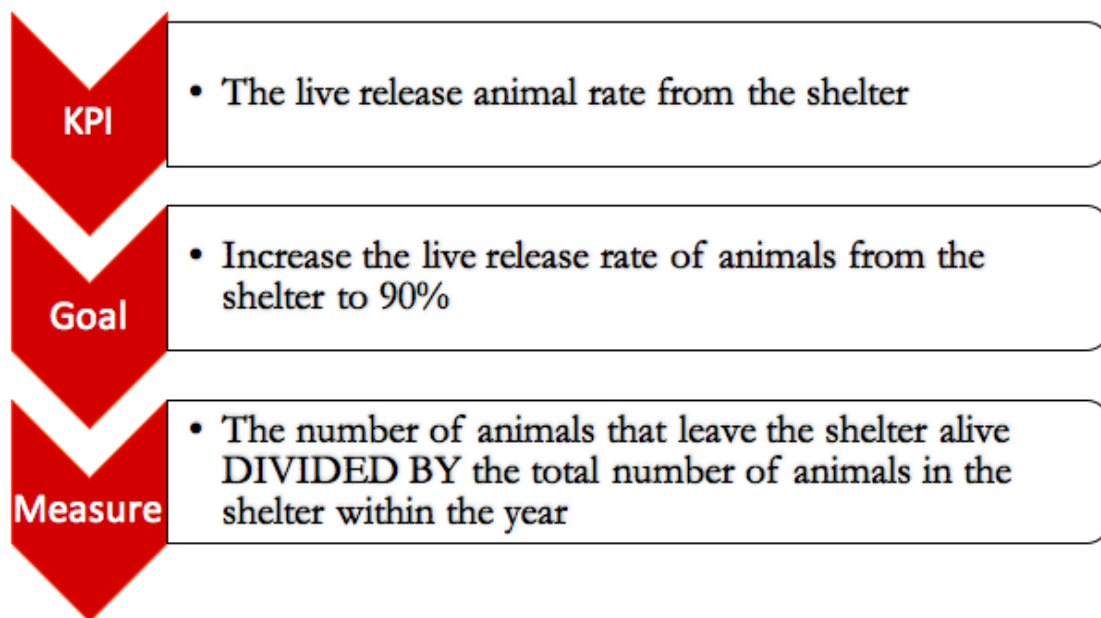
the most significant indexes. To see the big picture, Department manager need Actions and Additional Goals that will help to reach the end goal.

What are Actions? These are routine tasks, or action steps that guide the Public Works Divisions and staff to engage with a multi-step process, or road map, to meet the successful completion of individual goals. Of course, many factors will affect this success, so these actions are flexible and can be added to or subtracted from depending on the Divisions' needs. However, each action should include a measurable output or a product. For example, a report, date of successful implementation, etc.

What is an Additional Goal? For a more comprehensive picture of departmental goals, additional goals were added to offer Division heads further measures that remain important for internal performance measurement. These additional goals though are not necessarily intended for the 2019 Annual Budget, but should be used as an internal tool used by Division managers to assist with short-term goals. For example, the cost for maintenance services per month/year, the number of customers, the number of employees/volunteers per X amount of animal intake, etc. These are goals important for internal performance management but perhaps less important to external stakeholders such as the Mayor's Office and the public.

Figure 4 helps to explain our methodology, how the Primary Goal is related to KPIs, measurement of KPIs, and how the Mayor/public could use this information to determine and assess the performance of the Department.

Figure 4: Methodology for Public Works Department



FY 2018 Budget Goals

The FY 2018 Annual Budget includes a total of 102 goals across the Public Works Department's seven divisions. Development of Department goals not only measures employee and Division performance but also provides motivation, ownership in the work being done, and challenges the status quo. As a result, this leads to greater efficiency, effectiveness of services, and increased public trust in the Department's capabilities.

Goals should be very specific, actionable steps tied to a clear objective. The team analyzed the 2018 goals utilizing SMART principles to develop sound and easily interpreted goals. Based on this analysis, the Public Works Capstone team found that some of the goals did not meet measurable, clear, and direct expectations for a meaningful and manageable goal for the Divisions to achieve. Below are examples of common goal setting mistakes from the FY 2018 Budget:

- The goal is general and unclear as to who will complete the goal and what the determined output/product would be.
- The goal is not specific—it uses words such as: “improve,” “continue,” or “remain.” Goal writers should elucidate what exactly “improve” means in the context of the goal. For example, adding a measure to a goal offers a target to attain and encourages employees to achieve it.
- Some goals show a target range rather than an exact target number. A goal for the Sanitation Division says: “Increase the recycling participation rate by a volume of 10-12% to improve solid waste reduction initiatives.” It is not clear as to what point the goal is achieved and if the target is 10%, 11%, or instead 12%.
- Some goals were written as activities but cannot be considered as metric-driven goals, for example: “discuss/coordinate with...,” “provide monthly updates,” “complete draft of...,” “identify opportunities,” “explore potential...,” and “collect data from...”

FY 2019 Budget Goals Recommendations

When considering the existing 2018 goals for our four primary Divisions, the team aimed to form Primary Goals following the SMART guidelines to: (1) eliminate budget goals that were primarily activity-focused rather than outcome-focused; (2) re-write goals for greater clarity and; (3) include new metric-driven targets for the Division to pursue.

The tables below offer examples of four original goals from the Annual Budget, titled “FY 2018 Goal,” and the rewritten goal by the SPEA team, titled “FY 2019 Goal.” As a note, these goals were chosen from the original 2018 Annual Budget as examples of how each goal was analyzed.

Animal Care and Control	
FY18 Goal	FY19 Goal
Improve communication with volunteers, via Volgistics, email, and postings within the future Volunteer Lounge to improve experience of volunteers and decrease turnover.	Communicate with all volunteers once per week via Volgistics or email.

After reading the initial goals, we had a couple questions. They were as follows: (1) how often should volunteers be communicated with? and; (2) how does communication with volunteers via the Volunteer Lounge help with outreach to those not volunteering regularly? Asking questions like these help the Division decide what is important about the goal to determine what precisely we are trying to measure to identify the desired outcome. For example, if the shelter aims to increase volunteer involvement, how does communication via the Volunteer Lounge encourage participants who have not volunteered in a while to return? For this reason, the goal of “once per week” should apply only to email and Volgistics communication; however, this does not mean the Volunteer Lounge cannot include postings.

Fleet Maintenance	
FY18 Goal	FY19 Goal
Periodically check for damage and possible replacement.	Inspect X% of all vehicles in the fleet before Dec 31st, 2019. Replace X% of vehicles reaching the end of their useful life by 2019.

As it’s written, this goal for FY 2018 is an activity or routine task, and does not indicate a targeted goal. This lack of clarity risks the reader of the Budget Goals or the Division employee misunderstanding how to evaluate the goal, including when and why they should achieve the goal, what is the output of the goal, and how to measure its success. The recommended goals target inspection and replacement of vehicles, and therefore requires a careful assessment of current division metrics before setting the target. Finally, it offers a specific, and timely date to finish these goals.

Sanitation	
FY18 Goal	FY19 Goal
Provide Christmas tree curbside collection for the community.	Provide X rounds and Y curbside points of Christmas tree curbside collections for all residential neighborhoods by January 31.

This is not a specific goal with clear services provided for Christmas tree curbside collection. It is better to add a method, a specific geographic area for collection, or a schedule plan for Christmas tree collections.

Street Operations	
FY18 Goal	FY19 Goal
Conduct a tree maintenance program in collaboration with the City’s Urban Forester to reduce the number of accidents caused by damaged or dying trees.	Reduce the number of vehicular accidents caused by damaged or dying publically maintained trees by X% each year.

The problem with the 2018 goal is that it has two goals in one: collaborating with the Urban Forester and reducing the number of accidents. The recommended goal focuses only on reducing accidents and also includes a metric. Collaborating with the Urban Forester instead is an important step to take in achieving the target goal.

Primary Recommendations

Mayor’s Office Recommendations

The team developed three Primary Goals for each of the four divisions (12 in total) based on the Divisions’ most important tasks. Based on the 12 established KPIs, the Mayor’s Office could track the result of monthly, quarterly, and yearly progress and therefore make new targets/strategies for following years. The table below shows the 12 Primary Goals divided by Division for the Mayor’s Office. A sample template for the Mayor’s office to assess the performance indicators of the Fleet Maintenance Division throughout the years can be found in Appendix E, Figure E1.

2019 Budget Recommendations: Public Works

	KPI	Goal	Measurement
Animal Care and Control			
1	Rate of animal intakes per year	Decrease the amount of intake animals by 5% compared to the previous year	Sum of animal intakes in the current year DIVIDED BY the Sum of animal intakes in the previous year
2	Rate of complaints addressed within the appropriate time frame	Respond to 100% of citizen complaints within 20 minutes for emergency calls and 24 hours for non-emergency calls	Number of complaints addressed within the appropriate time frame DIVIDED BY the total number of complaints
3	Rate of live release of animal from the shelter	Increase the rate of live release of animals from the shelter to 90%	Number of animals that leave the shelter alive within the year DIVIDED BY the Number of total animals in the shelter within the year
Fleet Maintenance			
1	Rate of Fleet preventative maintenance on-time service completion per month	Complete 90% of on-time fleet preventative maintenance services within a month	Number of vehicles/machines available at the end of month DIVIDED BY the total number of vehicles/machines at the end of month
2	Rate of vehicle/machine available at the end of the month (%)	X% of all city vehicles/equipment will be available when needed	Number of vehicle/machines available at the end of the month DIVIDED BY the number of vehicle/machines at the end of the month
3	Rate of emergency service completed within 24 hours (%)	Complete 100% emergency service within 24 hours	Number of emergency services completed within 24 hours per year DIVIDED BY the total of required emergency services per year
Sanitation			
1	Rate of Recycling participation	Increase the rate of residential recycling participation by a volume of 10%	Number of participating households DIVIDED BY the total number of possible households
2	Rate of recycling diversion	Increase the rate of recycling diversion to 48%	Weight of recycled material divided by the total weight of recycled materials and garbage

3	Number of days all waste receptacles and public spaces are cleaned	Collect trash from all downtown waste receptacles and litter from downtown public spaces for 250 days in the year	Number of days waste is collected and streets cleaned of litter per year
Street Operations			
1	Pavement Condition Index (PCI)	Increase the city-wide average PCI by at least 1 point for each year. Once a score of 85 has been achieved, maintain that score for each year it is measured.	PCI for the year
2	Time of snow removal response	Plow 100% of city streets within 24 hours after two inches of snowfall or more have accumulated	Length of streets plowed in 24 hours DIVIDED BY the total length of streets
3	Time of citizen complaint response	Address 95% of citizen reports within one working day and 100% of complaints within two working days	Number of citizen complaints addressed within 24/48 hours DIVIDED BY the total number of citizen complaints

Public Works Recommendations

This section is intended for use internally by the Public Works Department to guide the Divisions toward proper measurement of the KPIs and successful completion of the 12 Primary Goals. There is a section below for each of the four Divisions that the team analyzed. Each section describes the Primary Goals in more detail along with their associated Actions, followed up with a short description of Additional Goals, if applicable.

Animal Care and Control

Bloomington Animal Care and Control is a Division of Public Works responsible for “addressing and responding to all companion animal needs in the community through education, enforcement and support in order to build a community in which people value animals and treat them with kindness and respect.”²⁶ Animal Care and Control is also the base for the City of Bloomington and Monroe County animal control services.

As stated in the above section, this team suggests that Animal Care and Control focus on three primary KPIs and Goals in 2019. The following charts below outline the recommended 2019 **Primary Goals** along with **Actions** or steps the department can take to achieve these goals. Many of these actions were taken from the original 2018 Budget Goals for Animal Care and Control. As stated previously, these action steps are intended for internal operational use.

²⁶ Mayor John Hamilton “Public Works” in *2018 Budget Proposal* (August 10, 2017).

2019 Budget Recommendations: Animal Care and Control

		KPI	Goal	Measurement
2019 Primary Goals				
	Actions			
No. 1		Rate of animal intakes per year	Decrease the amount of intake animals by 5% compared to the previous year	Sum of animal intakes in the current year DIVIDED BY the sum of animal intakes in the previous year
	Action 1		Increase spay/neuter surgeries by 5%	Sum of spay/neuter surgeries within a year DIVIDED BY the sum of spay/neuter surgeries the previous year
	Action 2		Provide behavioral counseling and adoption follow-up for XX% of adopted animals per year	Rate of animals returned to the shelter after adoption DIVIDED BY the total number of adopted animals
	Action 3		Provide free leashes and food for eligible households up to XX amount of dollars	Total dollar amount of leashes and food distributed to needy families in a given year
No. 2		Rate of complaints or service calls addressed within the appropriate timeframe	Respond to 100% of citizen complaints within 20 minutes for emergency calls and 24 hours for non-emergency calls	Number of complaints addressed within the appropriate time frame DIVIDED BY the total number of complaints
No. 3		Rate of live release of animal from the shelter	Increase the rate of live release of animals from the shelter to 90%	Number of animals that leave the shelter alive within the year DIVIDED BY number of total animals in the shelter within the year
	Action 1		Hold 40 off-site adoption/education events in the community	Total number of adoptions per year DIVIDED BY the total number of adoptable animals per year
	Action 2		At least 25% of all intake shelter animals will enter a shelter foster home	Total number of animals in foster care DIVIDED BY the total number of animals in the shelter per year

	Action 3		Update all shelter advertisements of adoptable animals once a week, including the shelter website, social media and printed ads.	Number of weeks shelter animal advertisements were updated per year
	Action 4		Reduce our shelter LOS (length of stay) for dogs at 15 days and cats at 25 days	Total number of animals that met the LOS goal DIVIDED BY the total number of animals in the shelter
2019 Additional Goals				
		KPI	Goal	Measurement
No. 4		Number of volunteer hours	Complete a total of 12,000 volunteer hours	Total number of volunteer hours per year
	Action 1		Decrease the volunteer turnover rate to XX percent	Number of people volunteering for at least two hours once per week DIVIDED BY the total number of volunteers in a six-month period
	Action 2		Increase "Borrow-A-Dog" program hours to 500 total hours in 2018.	Total number of "Borrow-a-Dog" hours logged per year
	Action 3		Communicate with all volunteers once per week via Volgistics or email	Total number of volunteer communications per year DIVIDED BY the total number of working weeks in a year
No. 5		Rate of Active license of chicken flock permits	Inspect 100% of active chicken flock permits within XX time period.	Total number of up-to-date permits DIVIDED by the total number of chicken flock permits
No. 6		Rate of prompt animal welfare services	Screen all intake animals within one day including administering standard vaccines, treatments, grooming, behavioral assessments, etc.	Number of animals that go through intake procedures within 24 hours DIVIDED BY the total number of intake animals

All goals were determined from research on animal shelter operations, and in particular from a book called “Every Nose Counts: Using Metrics in Animal Shelters” by Dr. J.M. Scarlett. Whereas the other Public Works Divisions guided their priority goals primarily on the results of the 2017 Bloomington Community Survey, Animal Care and Control was rated “High Quality/Low Importance.” Outside research therefore informed the development of these new goals. Research on best practices in animal shelters revealed primary objectives that all shelters should pursue: (1) reduce the intake of animals to the shelter; (2) provide for the best welfare possible for all shelter animals and; (3) reduce the live release rate for animals at the shelter.²⁷ This was the basis for determining primary goals.

Primary Goal 1: Decrease number of animal intakes by 5% per year

This goal is an important indicator that measures the number of animals entering the shelter and the source of the animal’s origin. Common sources include owner surrenders, strays, transfers from other shelters, and adoption returns. Reducing homeless animal intake from the community and the risk of owner-surrenders are primary methods to reducing intake numbers and reducing the burden on communities and the shelter. Programs aimed at intake reduction include spay/neuter programs, behavior/obedience training programs and “pet food banks” to reduce the rate of owner-surrenders to the shelter. Recommended actions taken within Primary Goal 1 were also original goals in the 2018 Annual Budget, yet reworded here with added metrics.

The Dallas Animal Care and Control Division identified the primary reasons for loose or stray animals. See Appendix E, Figure E2 for details. The primary recommendations for this goal and actions identified to accomplish these goals were based on the findings from the Dallas, Texas Animal Care and Control Department.

As a note, the expected number of homeless animals is related to the population of the City in which the shelter operates. To determine trends over time, the population, including significant changes to the population and age distributions in the City, may alter the expectations of homeless animals and therefore should be considered when determining intake goals from year to year. The suggested calculation based on Dr. J.M. Scarlett’s research, mentioned above, is as follows:²⁸

$$\text{Annual intake per 1,000 humans (during a specific time period)} = \frac{\text{Annual Intake}}{\text{Total Human Population}} * 1000$$

One additional recommendation from Dallas that Bloomington could consider is to track service calls by zip code to determine areas with the highest rate of issues and then target those areas with

²⁷ Janet M. Scarlett, Michael Greenberg, and Tiva Hoshizaki, *Every Nose Counts: Using Metrics in Animal Shelters* (San Bernardino, CA: Maddie’s Fund, 2017).

²⁸ Janet M. Scarlett, Michael Greenberg, and Tiva Hoshizaki, *Every Nose Counts: Using Metrics in Animal Shelters*. (San Bernardino, CA: Maddie’s Fund, 2017).

specific programs such as spay or neuter campaigns or dog trainings in an effort to reduce loose animal calls, vicious animal calls, or pet resources for those living under the poverty line.²⁹

Primary Goal 2: Respond to 100% of citizens complaints within 20 minutes for emergency calls and 24 hours for non-emergency calls.

This goal is important for the Division as this is a very externally-focused goal with a high likelihood of importance to the community. This was developed based on research from the City of Richmond policies on animal response times.³⁰ Thus, recommendation includes a tiered response system depending on the type of call. See Table 2 for details.

Table 2: Recommended Tiered Response System for Animal Care and Control

Level of Call	Types of Complaints	Response Time Goal
<p align="center">Level 1</p>	<ul style="list-style-type: none"> -Animals that are attacking or creating a safety hazard. – Critically injured animals. -Unrestrained animals that have bitten someone. -Animals with special needs. -Animals in a home posing a health of safety risk. -Large Animals running loose. 	<p align="center">20 minutes</p>
<p align="center">Level 2</p>	<ul style="list-style-type: none"> -Dogs running at large that are not causing problem or danger. -Nuisance animals -Deceased animals 	<p align="center">24 hours</p>

Classifications of complaints divide the activity into levels of priority and associates a given response time for each. These response times should serve as the basis for measuring successful completion of the goal. Level 1 describes emergency service calls and Level 2 represents a lower emergency level.

²⁹ City of Dallas. “Animal Services: Budget & Metrics” (September 2, 2015), http://dallascityhall.com/government/Council%20Meeting%20Documents/a_das-budget-and-metrics_combined_090215.pdf

³⁰ Richmond City Council. “Audit of the Department of Animal Care and Control” (January 2013), www.richmondgov.com/Auditor/documents/2013/13-04_RACC_Audit.pdf

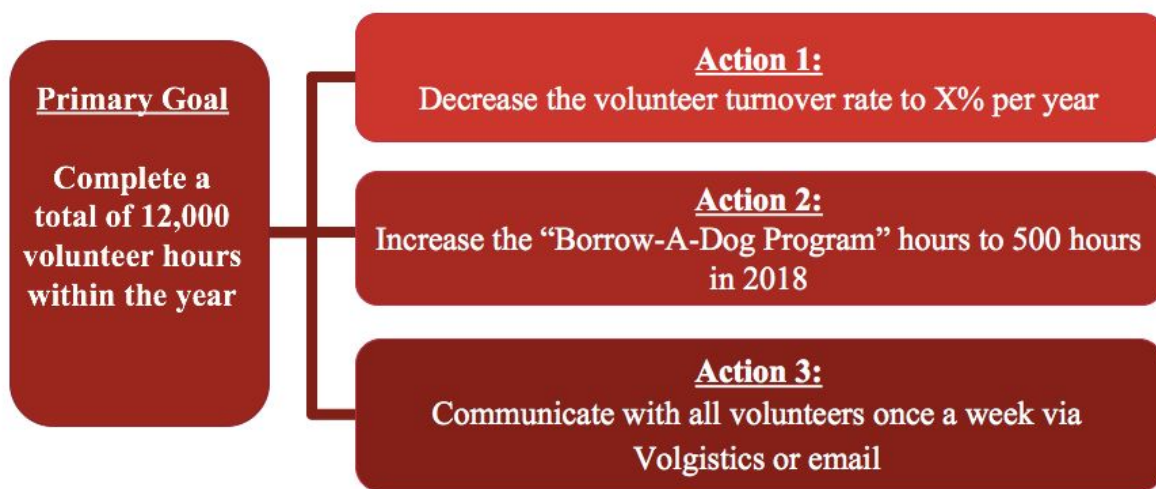
Primary Goal 3: Increase the live release rate of shelter animals to 90%

This was an existing goal for the Division and an important indicator that we have chosen to retain. The live release rate is a powerful tool to demonstrate to the community the shelter’s accountability, innovation, and life-saving measures — this measure is an honest and accumulated measure of multiple factors. Factors include the percentage of animals adopted, and the number returned to owner or transferred to a rescue, as opposed to being euthanized. This is ultimately about moving animals through the “system” to ensure their ultimate well-being. Identifying this information shows leadership where the gaps in programming exist to increase efforts of ensuring as many animals as possible receive a second chance. This metric especially helps to identify and lower the *healthy* and *treatable* animals that shelters euthanize for space concerns or adoption inability.

To assist with tracking multiple data points for this goal, the No Kill Advocacy Center suggests tracking intake statistics to determine areas of improvement. Please see the Appendix E, Figure E3 for further details.³¹

Additional Goals: Additional goals were mainly identified from the original list of goals in the 2018 report but were not deemed key indicators for external stakeholders of the Department. Nonetheless, these remain important goals and activities that the Division should track for internal performance metrics. Volunteers, especially, are an important part of the workforce of the shelter. Studies have shown that the higher an animals’ well-being with life — which human attention, play, adequate food and water, shelter, etc — the increased chance an animal has for adoption. Active engagement with volunteers to retain them and maintain interest in their work is a notable step to take in increasing adoption rates. This includes the additional goal of maintaining prompt animal welfare services, especially during intake, to ensure animals are treated according to their needs promptly and with as little discomfort as possible. Below is an additional example looking at the impact of volunteer participation and the actions steps the Division can take.

Figure 5: Example of Primary Goal and Related Action Steps



³¹ No Kill Advocacy Center. “Calculating an Animal Shelter’s Live Release Rate,” <https://www.nokilladvocacycenter.org/uploads/4/8/6/2/48624081/calclrr.pdf>.

Fleet Maintenance

The main function of the Department of Fleet Maintenance is to complete maintenance and repairs, as well as the distribution of fuel for the City's fleet of vehicles and equipment. These services ensure that all City Departments have the vehicles and equipment necessary to provide services to the citizens of Bloomington³². The challenge for the Fleet Division is to examine potential measures of success to determine appropriate key performance indicators (KPIs) that is relevant, easy to understand, and actually drives behaviors and performance in the right direction. Many tasks assigned to this division, such as preventative maintenance or emergency services, are not easy to measure and predict since "not everything that counts can be counted, and not everything that can be counted actually counts."³³ This means that just because something can be measured does not mean that it should be a major focus and may not have relevance to City goals and priorities. Within this analysis, we offer recommended methods to analyze problems with performance as researched from comparable cities and additional sources. Below is a table of the three recommended KPIs, goals, and measurement suggestions, and recommended action steps to reach these goals.

³² Mayor John Hamilton "Public Works" in *2018 Budget Proposal* (August 10, 2017).

³³ Edward E. Lawler III and John W. Boudreau, *Global Trends in Human Resource Management: a Twenty-Year Analysis* (Stanford, California: Stanford Business Books, an imprint of Stanford University Press, 2015), Chapter 7 and 8.

2019 Budget Recommendations: Fleet Maintenance

		KPI	Goal	Measurement
2019 Primary Goals				
	Actions			
No. 1		Rate of Fleet preventative maintenance on-time service completion per month	Complete 90% of fleet preventative maintenance on-time service within a month.	Number of vehicles/equipment available divided by the total number of vehicles/equipment
	Action 1		Identify and evaluate potential vehicles or equipment for maintenance	Number of preventative maintenance work orders per month
	Action 2		Implement a vehicle telematics and GPS system for the entire City fleet before December 2019	Date new system is implemented
No. 2		Rate of vehicles/equipment available at the end of month (%)	X% of all city vehicles/equipment will be available when needed	Number of vehicles/machines available at the end of month DIVIDED BY the total number of vehicles/machines at the end of month
	Action 1		Rate of Vehicles available	Number of Light Duty, Medium Duty and Heavy Duty Available at the end of month DIVIDED BY the total number of vehicles at the end of month
	Action 2		Rate of Equipment available	Number of Light Duty, Medium Duty and Heavy Duty Equipment Available at the end of month DIVIDED BY the total number of Equipment at the end of month
	Action 3		100% of required routine tasks completed on time	Number of routine maintenance service completed DIVIDED BY the total number of routine maintenance services required per year
	Action 4		100% of annual testing completed for IDEM	Rate of the on-time completion of IDEM testing per year

	Action 5		Reduce average idle times of vehicles by X% compared to the previous year	Average vehicle idle time this year DIVIDED BY the average vehicle idle time the previous year
	Action 6		Complete departmental needs review for 100% of vehicle purchases and recommend fuel efficient options	Monthly fuel report update
No. 3		Rate of emergency services completed within 24 hours (%)	Complete 100% of emergency services within 24 hours	Number of emergency service completed within 24 hours DIVIDED BY the total number needed emergency services per year
	Action 1	Rate of response times under 30 minutes	Complete X% response times under 30 minutes	Number of response times under 30 minutes DIVIDED BY the total number of response times (under 30 minutes and over 30 minutes)
	Action 2		Address 100% of citizen reports regarding alley conditions within 2 business days	Number of alley reports addressed within 48 hours DIVIDED BY the number of alley reports

2019 Additional Goals

		KPI	Goal	Measurement
No. 4		Rate of complaints solved	Reduce the rate of complaints to X%	Number of complaints solved DIVIDED BY the total number of complaints per year
No. 5		Cost of maintenance services	Reduce 10% of the cost of maintenance services (Routine and emergency)	Amount (in \$) spent on maintenance services (routine and emergency services) DIVIDED BY the amount spent on maintenance in the previous year

Primary Goal 1: Complete 90% of fleet preventative maintenance on-time services within a month.

Preventative maintenance is the most important work for a Fleet Maintenance Division. and refers to regular, routine maintenance to keep equipment up and running to prevent as much unscheduled downtime and expensive costs from unanticipated equipment failure as possible. Based on the research in the cities of Austin³⁴, TX, Ann Arbor, MI, and other large cities, as well as based on the insight from professional maintenance organizations like Boeing and Airbus, we highly recommend the Mayor's office and the Division Head to focus on the KPI- "Fleet preventative maintenance on-time service completion rate per month." This measurement is important both for the short and long-term to ensure excellent servicing of Fleet Maintenance and the City's ability to provide consistent public services. This KPI is measured by the number of on-time, completed fleet preventative maintenance work-orders per month divided by the total number of fleet preventative maintenance work-orders per month. Because this indicator was not counted in the Division previously, we propose a target for 2019 based on average figures that we collected from other cities. Also, we have suggested two tentative actions, which we believe are necessary for this goal's success (see the table above). However, with each period of time, managers can add more actions to help ensure the completion of this goal.

Primary Goal 2: X% of all city vehicles/equipment will be available when needed.

The KPI of this goal is the "Rate of vehicles/machines available (or Fleet available)." This indicator is measured by the number of vehicles/equipment available divided by the total number of vehicles/equipment. The fleet-availability rate shows the rate of available vehicles and machines available for a point of time in which the Mayor's office and the Head of Public Works or Fleet Maintenance can use for making decisions about performance. For example, Appendix E, Figure E4 shows the rate of vehicles and equipment available from 2014-2017. We assumed here that the number of vehicles/equipment available equals the total number of vehicles/equipment, resulting in a fleet-availability rate of 100%. However, equipment breaks and sometimes need parts to be ordered. Therefore, the availability rate should be lower than 100%. This rate should be counted per day, per month, per quarter, per six months, or per year in order to deliver information to managers as needed. To make goals for 2019, the manager must add a metric-driven target and timeframe for the indicator; this is because the KPI is our long-term indicator of success, whereas the goal's metric can change from year to year based on performance trends. We therefore recommend the Primary Goal 2 as "X% vehicles/equipment available at the end of month." According to a consultant organization called Government Fleet³⁵, X% could be a number within 90 - 95%. However, only managers of Public Works and the Fleet Maintenance Division can determine whether this is a reasonable benchmark for Bloomington.

³⁴ City of Austin, "Performance Measures: Fleet Services,"

http://www.austintexas.gov/budget/eperf/index.cfm?fuseaction=home.Activity&DEPT_CD=FLEET&DIV_CD=7SVC&GP_CD=7VMR.

³⁵ Government Fleet

<https://www.government-fleet.com/channel/maintenance/article/story/2013/07/10-factors-affecting-fleet-availability-benchmarks/page/1.aspx>

Following Primary Goal 2 are *actions* that guide the Head of the Department, Division, and employees to achieve the goal. We believe that along with collecting information from the number of vehicles/machines available, other important activities include routine maintenance, annual testing for IDEM, and reviewing fuel availability. Therefore, we set those as actions for this goal.

Primary Goal 3: Complete 100% of emergency services within 24 hours

The KPIs of this goal is the “rate of emergency services completed within 24 hours.” The KPIs previously discussed focused on metrics for the short-term and improving the quality of all future fleet maintenance services. This KPI helps to ensure responsiveness to emergency services so that quality of the fleet is maintained over time. Therefore, the third KPI here is an emergency indicator because of the level of urgency of this service. In fact, this service is also one of the goals of Fleet Maintenance; however, the Division did not identify it as a key indicator. The use of this indicator will send the message that the Division is being held accountable for completing emergency service within 24 hours. However, this indicator could be affected by unexpected factors such as vehicles that cannot be addressed within 24 hours. The manager could set the relevant target for this indicator based on historical data and the capacity of the Division, such as 95%. Along with primary goal 3, we added one indicator as an action, which is the rate of response within 30 minutes.

Additional Goals: The indicators here include concerns about the cost and the rate of complaints for fleet maintenance service, or other concerns³⁶. They also have actions that managers of the Public Work Department and the Head of Fleet Maintenance could add to ensure the comprehensiveness of maintenance service.

Overall, in the process of collecting data and interviewing the Heads of the Public Works Department and Fleet Maintenance, we concluded that maintenance services in Public Works have been done well. However, there are some issues such as the effort needed for managing vehicles/equipment maintenance and the limits of the workforce that could be potential issues in the future. For example, the collection of data on vehicles every month in an excel spreadsheet is susceptible to mistakes due to human error. Further, these mistakes may not be noticeable early. Unsynchronized technology can result in a waste of resources (time and labor). Having too many goals can also reduce the focus and overwhelm staff and the administration. Therefore, we recommend the managers: (1) use software such as fleet management information systems (FMIS) to monitor equipment/vehicle status, warnings, and to report on the number of equipment available/needed to repair/replace; (2) perform intelligent maintenance analysis and planning with historical data; (3) use SMART principles to form all future goals and actions; and (3) use the matrix and KPIs that we have proposed.

Sanitation

The mission of the Sanitation Division is to provide “curbside collection of trash, recycling and yard waste to single-family residences that are within the City limits. It also provides trash collection from downtown containers, City parks, City Hall and a number of City facilities.”³⁷ In the budget reports

³⁶ Public Works- Key metrics for reliability-centered Fleet Maintenance.
http://www.pwmag.com/fleets/key-metrics-for-reliability-centered-fleet-maintenance_o

³⁷ City of Bloomington, Indiana, “Sanitation,” <https://bloomington.in.gov/sanitation>

over the years, Sanitation Division goals were grouped by four major services: Solid Waste Collection, Recycling Collection, Yard Waste Collection, and Downtown Pick-up. However, based on the findings of the FY 2017 Community Survey, Recycling Collection is determined as the most important service for the Division by citizens (See Appendix E, Figure E5). This should be a priority for additional research and recommendations. Although recycling is of high importance to citizens, it is ranked at low quality levels and the tons of recycling collected remains mostly unchanged over the past 13 years except for a slight increase in 2010 and 2011 (See Appendix E, Figure E6).

Due to the current quality of provided services, two out of three of the recommended Primary Goals for FY 2019 should be designed to improve the performance for recycling systems in the City. The third one is regarding the Downtown Pick-up service because the downtown area is the most crowded place in the City and is often the first impression for future residents, visitors, and potential investors. Improving the quality of the downtown environment is also a crucial task for the City government for economic development purposes and enhancing living standard for citizens. The table below illustrates in detail three primary goals with relevant actions for FY 2019.

2019 Budget Recommendations: Sanitation

		KPI	Goal	Measurement
2019 Primary Goals				
	Actions			
No. 1		Rate of recycling participation	Increase the rate of recycling participation by a volume of 10%	Number of participating households DIVIDED BY total number of possible households
	Action 1		Conduct at least 5 education opportunities (events, fliers, etc) per year in areas of low recycling participation rates	Number of publicly-provided education opportunities per year
	Action 2		Increase the weight of single-stream recycled materials using the automated system by 10%	Average pounds of recycled materials collected per participating entity per week
	Action 3		Facilitate the transition from 18-gallon containers to 96-gallon containers for 100% of relevant entities	Rate of relevant entities that have switched to the new containers within the year
No. 2		Rate of recycling diversion	Increase the residential recycling diversion rate to 48%	Weight of recycled material divided by the total weight of recycled materials and garbage
	Action 1		Provide receptacles that are labeled and classified for waste diversion in 100% of spaces	Number of provided receptacles for waste diversion
	Action 2		Provide two rounds of waste audits per year	Number of waste audits conducted per year
No. 3		Number of days all waste receptacles and public spaces are cleaned	Collect trash from all downtown waste receptacles and litter from downtown public spaces for 250 days in the year	Number of days waste is collected and streets cleaned of litter per year

	Action 1		Collect refuse from the 71 downtown cans and litter from streets and sidewalks on a daily basis	Average pounds of refuse collected out of 71 downtown cans and litter on a daily basis
	Action 2		Collect refuse and litter from all four municipal parking lots and park facilities on a daily basis	Average pounds of refuse and litter collected out of 4 municipal parking lots and park facilities on a daily basis
	Action 3		Provide the appropriate amount of recycling and waste receptacles for 100% of special events and festivals	The number of events provided appropriate quantities of container

Primary Goal 1: Increase the residential recycling participation rate by a volume of 10%.

This goal focuses on assessing the KPI of recycling participation rate, which is measured by the percentage of single family, residential properties participating in the recycling program out of total residences in the City. This is also one of the KPIs for recycling programs that many other cities, like Austin (Texas) and Asheville (North Carolina), have succeeded in using.

In the FY 2019 budget goal, the proposed amount of increase should be 10% rather than the range “10%-12%” in order to meet the Specific and Measurable principles of SMART goals. Also, this rate could be appropriate for FY 2019 because the average rate of recycling in Bloomington over the last five years is 34%, which is a high rate in comparison with other municipalities similar in size and scope to Bloomington.³⁸

Primary Goal 2: Increase the recycling diversion rate to 48%.

The recycling diversion rate is an important indicator for any recycling program because it presents the amount of waste diverted from landfills to other useful purposes, environmental benefits, reduced costs of disposal, and a decreased burden on landfills. This indicator is measured by the weight of recycled material divided by the total weight of recycled materials and garbage.

The suggested goal for FY 2019 is 48%, which is also the expected rate for FY 2018. This is because it is essential to reach the expectation of the United States Environmental Protection Agency (EPA) for each year—the increase for the following years should then be determined based on yearly trends, so that they are at least similar or higher than that of the previous year.

³⁸ Sanitation Modernization Advisory Committee, City of Bloomington, “Final Report of Sanitation Modernization Plan to Mayor John Hamilton” (2017).

Primary Goal 3: Collect trash from all downtown waste receptacles and litter from downtown public spaces for 250 days in the year.

Collecting and cleaning refuse and litter from different places in the downtown area is a main function of Downtown Pick-up Services. This activity is conducted daily to create and maintain a clean and inviting environment for the City's downtown. This means that if the collection is delayed or ineffectively conducted, it could affect negatively the surrounding environment and also the living standards of downtown residents. From this, the number of days that all waste from receptacles and public spaces are cleaned is a KPI that the City should focus on. After subtracting the estimated holidays, we suggested 250 days per year as an ideal number of days to plan for collecting all waste from downtown receptacles. This number can change depending on the discretion of the Department of Sanitation Division Head, but should still be enough to retain a clean downtown and offer a challenge for workers to aim for.

Street Operations

The 2018 Budget states that the Streets Division is “committed to providing public roadways and infrastructure that are safe and free of hazards.” Furthermore, the 2017 Bloomington Community Survey rated street repair as high importance but low quality. Snow removal was also rated as high importance and the majority of respondents rated this service as high quality. The KPIs and recommended goals focus on these two important services. The table below details the three primary goals of the Streets Division along with relevant actions. The progress of these goals should also be measured against citizen satisfaction ratings from subsequent Community Surveys.

2019 Budget Recommendations: Street Operations

		KPI	Goal	Measurement
2019 Primary Goals				
	Actions			
No. 1		Pavement Condition Index (PCI)	Increase the city-wide average PCI by at least 1 point for each year. Once a score of 85 has been achieved, maintain that score for each year it is measured.	PCI for the year
	Action 1		Pave 8% of street inventory each year based on PCI rating	Lane miles of street inventory paved DIVIDED BY total lane miles
	Action 2		Maintain 80% of arterial and collector streets in fair or better condition as rated by the PCI (55-100) and no more than 2% in very poor condition (less than 40)	Lane miles of arterial streets in fair/very poor condition DIVIDED BY total lane miles
	Action 3		Maintain 60% of local/neighborhood streets in fair or better condition and no more than 11% in very poor condition, as rated by the PCI	Lane miles of local streets in at least fair/in very poor condition DIVIDED BY total lane miles
	Action 4		Fill 1400 potholes per year	Number of potholes filled
	Action 5		Develop a citywide OCI rating at least once every two years. The city can accomplish this by conducting an assessment of half of the roads each year, or by completing one citywide assessment every other year	

No. 2		Time of Snow removal response	Plow 100% of city streets within 24 hours after two inches of snowfall or more have accumulated	Length of streets plowed in 24 hours DIVIDED BY total length of streets
	Action 1		Have all snow removal and salting preparations complete within 24 hours of anticipated snowfall. Begin spreading salt when the pavement starts to be coated with snow/ice	
	Action 2		Provide a live online map of snow plowing as its completed during 2+ inches of snow	
	Action 3		Arterial and collector streets return to normal speeds within 24 hours of the onset of accumulation	Average recovery time for main road speed limits
No. 3		Time of citizen report response	Address 95% of citizen reports within one working day and 100% of complaints within two working days	Number of citizen reports addressed within 24/48 hours DIVIDED BY the number of citizen reports
	Action 1		Provide same day or next-day pothole repair: address 95% of reports received within 24 hours, and 100% within 48 hours	Number of pothole reports addressed within 24/48 hours DIVIDED BY the number of pothole reports
	Action 2		Address 100% of citizen reports regarding alley conditions within 2 business days	Number of alley reports addressed within 48 hours DIVIDED BY the number of alley reports
	Action 3		Inspect 100% of citizen reports on unsafe trees and limbs within 24 hours	Number of tree reports addressed within 24 hours DIVIDED BY the number of tree reports.

Primary Goal 1: Increase the City-wide average PCI rating by at least 1 point each year. Once a score of 85 has been achieved, maintain that score for each successive year.

The Pavement Condition Index (PCI) is an important indicator that rates the overall quality of streets from 0 (failed) to 100 (excellent). Figure E7 in Appendix E describes the quality of the street based on its PCI rating, as categorized by the PAVER inventory management software. The corresponding legend in the figure describes the type of rehabilitation that is necessary along the different phases of pavement quality. As pavement quality degrades, repair costs increase significantly. Figure E8 in Appendix E shows an assessment by Portland, OR of how repair costs per lane mile increases as the PCI rating decreases.

In order to maintain high quality streets, while also encouraging cost-effectiveness, we propose the Pavement Condition Index (PCI) as the main KPI of the Street Division. The City of Palo Alto, CA has the best roads in Santa Clara County.³⁹ They attribute their high quality roads to an increase in funding, which more than doubled in the year 2011. Their City-wide PCI score increased from 72 in 2009 to 83 in 2018, averaging an improvement in the PCI score of 1.2 per year. The City of Palo Alto has a goal to achieve a City-wide PCI of 85 or greater in the coming years for their 488 lane miles of streets (compared to 234 lane miles in Bloomington). We recommend the City of Bloomington follow this example and increase the PCI by at least one point for each year. If the City reaches a score of 85 (which Palo Alto defines as excellent condition), or whatever rating the city determines is appropriate considering available resources and climate. Bloomington should aim to maintain that for every subsequent year.

Bloomington can strive toward this goal by taking certain actions, which essentially are supplemental goals, to help achieve this end. Currently, the City has a goal to, “pave 6% of street inventory each year based on Overall Condition Index (OCI) rating.” To match Palo Alto, Bloomington can establish the same goal to pave 8% of City lane miles each year.

Portland, OR—a peer city of Bloomington— has a goal to maintain 80% of arterial (main) and collector streets in fair or better condition as rated by the PCI (55-100) and no more than 2% in very poor condition (less than 40).⁴⁰ Furthermore, Portland has a goal to maintain 60% of local/neighborhood streets in fair or better condition and no more than 11% in very poor condition, as rated by the PCI. Bloomington should adopt similar goals as well.

Additionally, the issue of potholes is also a major concern for the Street Division. Longview, WA has a goal to repair at least 6 potholes per lane mile over their 138 lane miles of streets.⁴¹ According to this ratio, we recommend that Bloomington aims to repairs 1,400 potholes per year.

³⁹ City of Palo Alto, “Street Maintenance.”

https://www.cityofpaloalto.org/gov/depts/pwd/street_maintenance/default.asp.

⁴⁰ City of Portland, “Pavement Conditions + Goals” (June 27, 2016), accessed April 07, 2018,

<https://www.portlandoregon.gov/transportation/article/453884>.

⁴¹ Rose Lundy, “Longview Surpasses Street Repair Goals with Help from Additional Crew,” *Longview Daily News* (October 11, 2017), Accessed April 07, 2018.

http://tdn.com/news/local/longview-surpasses-street-repair-goals-with-help-from-additional-crew/article_466d715e-d356-5511-a2be-083f6504a5eb.html.

Ensuring progress on the PCI would also require periodically developing new PCI ratings. Depending on Bloomington's asset evaluation system, it may or may not be feasible to develop a new City-wide PCI every year. The City of San Diego, for example, develops a PCI every four years.

⁴² Bloomington can strive to develop one at least biannually, or the City can rate half of the City streets each year.

Primary Goal 2: Plow 100% of City streets within 24 hours after two inches of snowfall or more have accumulated.

Snow removal is another critical function of the Street Division, as such it is important to have a standardized plan of action during snow events. Carmel, IN, for example, salts and plows only main roads if the snow is up to 3 inches or more of snowfall.⁴³ It takes the City of Carmel, Indiana about 24 hours to plow its 450 miles of streets. Virginia Beach, VA, on the other hand, commits plows when 2 inches have fallen and it does not plow residential roads to bare pavement.⁴⁴ To err on the side of caution, Bloomington should have a target to plow 100% of City streets within 24 hours after two inches of snowfall or more have accumulated. Considering Bloomington residents already rate snow removal services high quality, the City can adjust this goal for snowfall events of 3 inches or more, or can have a policy of plowing only main roads until a certain height of snow accumulates, if it deems necessary.

Previously, Street Operations had a goal in the FY 2018 budget that stated simply: "Be responsive and proactive during snow and ice conditions through pretreatment and removal efforts during winter weather events." To make this goal more metric-driven, the team reworded it to: "Have all snow removal and salting preparations complete within 24 hours of anticipated snowfall. Begin spreading salt when the pavement starts to be coated with snow/ice." This also follows the practice done in Virginia Beach, VA. If the City of Bloomington finds this goal impractical, the time frame could be extended to 12 hours of anticipated snowfall.

Secondly, if the City finds it feasible, the Streets Division should provide a live online map of snow plowing as it is completed during 2 inches or more snow events. Spokane, WA (a city with more than 8 times the amount of lane miles compared to Bloomington) provides such a map, presented in the figure below.⁴⁵ The City of Spokane identifies roads that have been plowed, are currently being plowed, and roads to be plowed next. The figure below was not produced during a snow event, but the legend is illustrative.

⁴² City of San Diego, "Report to the City Council" (September 22, 2016),

https://www.sandiego.gov/sites/default/files/09_22_16_2015-2016_pavement_condition_assessment_0.pdf.

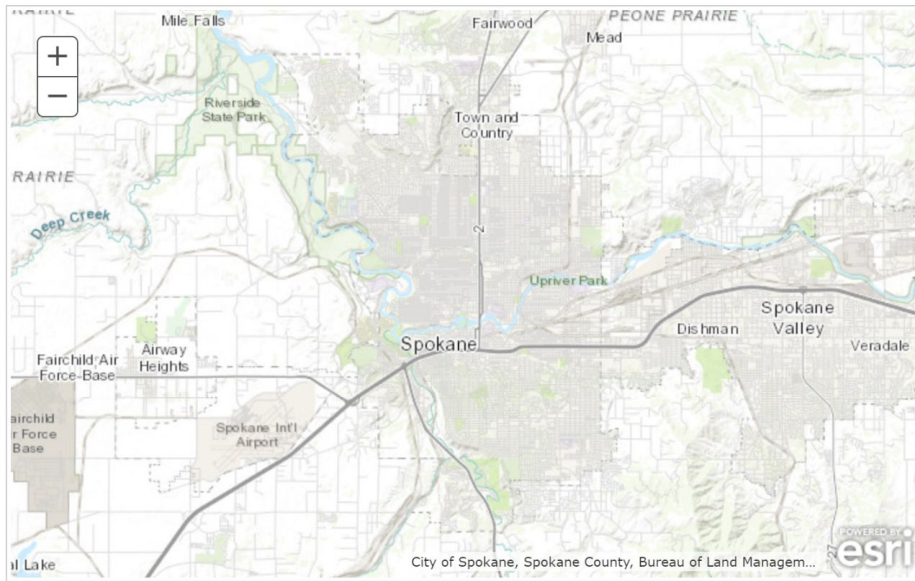
⁴³ City of Carmel, "Snow Removal," <http://www.carmel.in.gov/departments-services/streets/carmel-city-snow-removal>.

⁴⁴ City of Virginia Beach, "FY 2018 Snow Plan0,"

<https://www.vbgov.com/government/departments/public-works/roadways/Documents/Snow%20Plan%201-2018/snow-plan-procedure-rpt-fy-18-1-3-18.pdf>.

⁴⁵ City of Spokane, "Snow Response Operations," <https://my.spokanecity.org/streets/maintenance/snow-removal/>.

Figure 6: Map of Snow Removal Status



Snow Removal Status



The third action the Streets Division should take when plowing roads is to ensure that arterial and collector streets return to normal speeds within 24 hours of the onset of accumulation. Omaha, NE follows this goal every year.⁴⁶ To track progress toward this goal, Bloomington can measure the average recovery time to main road speed limits during snowfall events of 2 inches or more.

Primary Goal 3: Address 95% of citizen reports within one working day and 100% of complaints within two working days.

Responsiveness to citizen reports and complaints is also an important responsibility of the Streets Division. In the FY 2018 budget, the Streets Division categorized citizen reports based on the issue of concern. We recommend the Division develop a measure tracking responses to citizen complaints more generally as well and recommend a goal to address 95% of citizen reports within one working day and 100% of complaints within two working days. Addressing a report should not necessarily mean that the City remedies each issue within the proposed time frame. Rather, to properly address each issue the City should investigate the concern and respond to the citizen within the 48 hour time frame. The email response to the citizen should describe the findings regarding the complaint as well as whether the City deems corrective action is necessary or not. If corrective action is necessary, the response should detail whether the appropriate measures were already taken, or provide a timeframe of when the issue will be remediated, if it is not already resolved.

⁴⁶ Washington State University, “Snow Removal Performance Metrics” (May 2017), http://clearroads.org/wp-content/uploads/dlm_uploads/FR_CR.14-05_Final.pdf.

The FY 2018 budget has a goal regarding responsiveness to pothole complaints. After a slight rewording, we recommend the City, “provide same day or next-day pothole repair: address 95% of reports received within one working day, and 100% within two working days.” In addition to this, the City should improve the uReport system for citizen reporting of potholes and tracking responses to potholes. Bloomington should develop data figures which are updated continuously to reflect progress on potholes and citizen complaints. Figure E9 in Appendix E details the approach of Houston, TX for tracking pothole complaints made visible to the public through their website.⁴⁷ The City of Houston updates these figures daily, and categorizes complaints based on if the potholes have been filled, whether there are duplicate complaints, whether remediation is not necessary, and if the pothole report is still waiting an assessment. Additionally, Houston provides a pie chart detailing the percent of potholes filled the day of and by the next day.

Responsiveness to citizen complaints on alley conditions and unsafe trees and limbs is also important. The City should address 100% of alley condition complaints within 2 business days, and inspect all complaints regarding unsafe trees/limbs within 24 business hours. Finally, another similar, measure the City should track is citizen satisfaction for different services the Street Operations Division provides.

Conclusion

Building a performance measurement system needs many steps and time to reach the desired outcome. However, the recommended 12 Primary Goals and 12 KPIs, with more than 40 actions and additional goals, certainly provide the initial steps for the Public Works Department to find greater efficiency and effectiveness of services for the public.

As the performance measurement system is conducted, City managers, auditors, and evaluators should focus on issues in quality control. Typical issues relate to accuracy, data collection, and usefulness of performance measurement systems. Potential challenges include the technology costs, data collection, training the staff that is responsible for data quality, updating goals, and expectation issues. The next important steps in implementing these new goals is to carefully analyze the work flow process and the impact on employees and the public, monitor a pilot phase in tracking the new goals, and organize a plan to make revisions and provide necessary training to meet the new targets and record progress in the City’s software systems.

⁴⁷ City of Houston, “Potholes Tracker,” <http://houstonpotholes.org>.

Utilities

Introduction and Scope

At the beginning of this project with the Utilities Department, it was quickly determined that revising every departmental goal would be an impossible feat given the short timeline of this Capstone project. In the first meeting with Department head Vic Kelson and his Administrator, Holly McLaughlin, the team was able to get an overview of the department and its many divisions. During this meeting the team also determined the scope of the team's work for this semester to cover only the wastewater components of the department, excluding drinking water, stormwater, finance, and administrative budget goals. This narrowed the department goals we would be working on from twelve down to four major sections. Within the four major wastewater goal sections, eleven sub-goals are the focus of the team's efforts to revise the FY 2018 budget goals to SMART goals that better fulfill the request of the Mayor's office.

We received the vast majority of the information used in the goal revisions from emails, meetings, and calls with Administrator Holly McLaughlin and Capital Projects Manager, Mike Hicks. As detailed earlier in the literature review section of this report, our team utilized research gathered on other cities to gauge budget goals produced by the Utilities Department and identify areas for improvement.

FY 2018 Budget Goals

The FY 2018 budget goals did not meet the SMART criteria in that many goals lacked specific actions or equipment, measurable ways to determine goal completion, attainable marks, relevant information, and a timeline. Our team addressed these issues by creating a SMART model for each existing goal and seeking data from the department to complete the revision of FY 2018 goals.

FY 2018 Revised Budget Goals Recommendations

This section displays the original goal from the FY 2018 budget on the left and the revised FY 2018 goal on the right. Due to limited time we were unable to obtain 2019 data and write goals for the FY 2019 budget. Included in this report as examples of SMART goals, the recommendations focus on two Sanitary Sewer Overflow goals, three Dillman Road WWTP goals, four Blucher Poole WWTP goals, and an Engineering goal. Beneath each original and revised goal is an explanation regarding the reasoning and process utilized in the creation of the revised goal.

Sanitary Sewer Overflows	
FY18 Goal	Revised FY18 Goal
Reduce Inflow & Infiltration to the sewer system by investing in strategic sewer lining projects, thereby reducing operational costs at the plants and improving our ability to manage wet weather. Each sewer lining project is expected to reduce wet-weather inflow and infiltration by 25% in the area served.	Install 25,000 feet of lining to the sewer system. To be completed by end of FY 2018, with another 12,500 feet of lining installed in 2019. In total, the project will cost no more than \$710,000 in 2018 and no more than \$400,000 in 2019.

This goal was originally in the Engineering section of the 2018 budget, but due to its direct applicability to the Sanitary Sewer Overflow section, it was deemed best to move it. Similar to the weir cover goal below, the multi-year complexity of this goal was determined to be important to include in the goal to provide a better understanding to the public.

As part of a glossary section in the budget (see short-term recommendations below), we suggest the addition of information related to this project in addition to a brief explanation of the SCADA system. A description for this goal in particular would read: *To reduce maintenance costs, sanitary sewer overflows, effectively manage large rain events, and lengthen the effective lifespan of the sewer system.*

Dillman Road WWTP	
FY18 Goal	Revised FY18 Goal
Continue replacement of equipment that is at end-of-life condition.	Replace equipment at plant currently at end-of-life condition including all valves, actuators, flow meters, non-potable water pumps, and backwash pumps. This equipment is equivalent to 22% of total plant equipment, costing no more than \$1 million, and will be replaced by October 2018.

In the revision of this goal, our team sought information to expand the original goal within the SMART model. This meant we looked for specifics in terms of the equipment that is at end-of-life condition, how much will be replaced this year, and the costs of replacement.

Dillman Road WWTP	
FY18 Goal	Revised FY18 Goal
Implement an improved SCADA system, including an improved historian.	Implement centralized data management system, SCADA, for all water treatment plants to be completed by October 2018, costing no more than \$240,000 across three plants. (Monroe WTP, Blucher Poole WWTP, and Dillman Road WWTP).

Similar to the goal revision above, the information we received from Administrator Holly McLaughlin, as well as research online of other City Utility departments use of SCADA to better explain the SCADA and historian system for public understanding as well as adding the timeline, cost, and use of the system across several treatment plants.

As part of a glossary section in the budget (see short-term recommendations below), we suggest the addition of information related to this project in addition to a brief explanation of the SCADA system. A description for this goal in particular would read: *This will allow data that is currently only available on-site to be available remotely, automatic data collection and analysis to alert staff to potential problems before they occur, and new data measurements available as well as additional flow meters installed.*

Dillman Road WWTP	
FY18 Goal	Revised FY18 Goal
Add weir covers to clarifiers for algae control.	Install weir covers on clarifiers to improve water quality exiting plant in a three year project. Of the six (6) clarifiers, two (2) will receive covers by end of 2018, two (2) will receive covers by the end of 2019, and the final two (2) will receive covers by the end of 2020. The total project will be completed by end of 2020 costing no more than \$600,000.

The team determined that this goal in particular has a multi-year timeline for implementation due to the complex nature of the project. During the process of acquiring the necessary data for the goal

revision, the team received the information for the entire three-year project of weir cover installation and decided it is best to include all information to better inform citizens reading the budget.

Blucher Poole WWTP	
FY18 Goal	Revised FY18 Goal
Continue replacement of equipment that is at end-of-life condition.	Replace equipment at plant currently at end-of-life condition including mechanically cleaned screens, screen washer, and compactor. This equipment is equivalent to 15% of total plant equipment, costing no more than \$200,000, and will be replaced by October 2018.

In the revision of this goal, the team sought information to expand the original goal within the SMART goal model, similar to Dillman Road. This meant the team looked for specifics in terms of the equipment that is at end-of-life condition, how much will be replaced this year, and the costs of the replacement.

Blucher Poole WWTP	
FY18 Goal	Revised FY18 Goal
Implement an improved SCADA system, including an improved historian.	Implement centralized data management system (SCADA) for all water treatment plants to be completed by October 2018. Across the three plants (Monroe WTP, Blucher Poole WWTP, and Dillman Road WWTP) the SCADA system will cost no more than \$240,000.

This goal revision is the same as the SCADA goal under the Dillman Road WWTP. The information we received from Administrator McLauchlin, as well as research online of other City Utility department use of SCADA to better explain the SCADA and historian system for public understanding as well as adding the timeline, cost, and use of the system across several treatment plants.

As part of a glossary section in the budget (see short-term recommendations below), we suggest the addition of information related to this project in addition to a brief explanation of the SCADA system. A description for this goal in particular would read: *This will allow data that is currently only available on-site to be available remotely, automatic data collection and analysis to alert staff to potential problems before they occur, and new data measurements available as well as additional flow meters installed.*

Blucher Poole WWTP	
FY18 Goal	Revised FY18 Goal
Improve the non-potable water system.	Replace entire non-potable water system. This includes pumps, which are currently at end of life condition, and the control system, which does not meet the needs of other recently installed equipment. All replacements will be completed by the end of 2018, costing no more than \$200,000.

The revision of this goal underwent a very similar process to the end of life condition equipment goals, which focuses on specifying the goal timeline, cost, and exact equipment that will be replaced.

Engineering	
FY18 Goal	Revised FY18 Goal
Complete the South Central Interceptor project before the end of 2018.	Complete construction of South Central Interceptor, to improve existing sewer infrastructure along Walnut Street, between Davis St and Gordon Pike, costing no more than \$7,500,000 and completed by the end of FY 2018.

The revision of this goal involved information gathering, inputting the timeline and costs of the project as well as affected area the South Central Interceptor was created to improve in order to better inform the public about the intentions of this very large project.

Additional Recommendations

In addition to the adoption of these FY 2018 Revised Goals, the team recommends the adoption of short- and long-term projects.

Short-term

Update Trello Cards with SMART goals. As part of our discussions with the department, our team has begun the creation of more detailed descriptions of the revised goals to be utilized in cards on the department Trello board. The Trello cards on the board will allow for better internal performance management of annual goals.

Expansion of Revised Goals. Due to the short nature of this project, the team was unfortunately unable to tackle the entire list of department goals. We recommend the creation of similar revised goals using the SMART model for goals in the drinking water, storm water, administration, and finance divisions of the department.

Add a glossary of terms with Department goals in the next City budget cycle. To further enhance the understanding of the public in the goals of the department, we recommend the addition of a glossary of terms. Examples include ‘weir covers’, which by including in a glossary would reduce the necessary length of goals, while still improving public understanding of department operations.

Long-term

Invest time in discovering data gaps that can be resolved, in part, by data integration. In addition to the desire for a more accessible dashboard, the Department has made known in conversations with the team that a better data management integration system would greatly benefit the updating of information. This would include a way to streamline updates of information between Google Sheets, B-Clear, and a dashboard.

Conclusion

The Capstone Utilities Department team has thoroughly enjoyed our semester learning about the Bloomington Utilities Department and applying our knowledge of government management and performance management to this department. Our team believes our recommendations will improve the management of the department and provide a format for future use across the entire department. We greatly appreciated this opportunity and hope our efforts are helpful to the Utilities department and the management of its many complex operations.

City-wide Recommendations & Next Steps

Example City Overview

This report has presented relevant and useful information from example cities and departments that use performance metrics. These cities and departments were chosen because they share initiatives and goals that are similar to the City of Bloomington or because they are setting a standard in their respective disciplines for performance measurement. Additionally, they are utilizing tools and technology that the City may find useful.

Due to the unique nature of each city, the demographics, and geographic location and climate, it is more difficult to establish industry standards. Each city adjusts their approach due to these characteristics. As more municipalities continue utilizing performance metrics to support their missions of transparency, accountability, and innovation, we will see standard practices occur. With increased performance measurement and management, Bloomington has an opportunity to be one-of-a-kind and create model practices that will be examples to other cities.

While we aim for Bloomington to become a city that others look to for reference, we highly encourage City departments and the Office of the Mayor to stay well informed of the practices of other cities. These cities should include those who demonstrate an exemplary use of performance measurement and management. Ideally looking at cities that are similar to Bloomington in size, climate, and other characteristics. Additionally, measurement collaboration between Bloomington departments should be a standard practice to effectively utilize in-house resources, both human capital and technological. Shared information within the field of public management will continue to support innovative and efficient practices in performance management.

In speaking with the Capstone group, Deputy Mayor Mick Renneisen referenced example cities that the City of Bloomington has been known to review, including Ann Arbor Michigan, Asheville North Carolina, Austin Texas, and Portland Oregon. He also informed us of the high performance of the Bloomington Fire and Parks & Recreation Departments. He noted that each of them could be considered examples of how the City utilizes performance metrics to create and attain FY goals that support the City's overall mission. Each of these cities and departments was reviewed by each team within our Capstone in an effort to research how they utilize metrics to measure performance. Shown in Table 3, are the supplemental example cities and departments that each team explored apart from the cities recommended by Deputy Mayor Renneisen.

As an additional resource, the City could refer to the International City/County Management Association (ICMA)⁴⁸ to explore and identify other cities that may help in serving as a benchmark in the future. This association follows cities across the globe closely as they pursue better utilization of performance management. They offer certification in performance management and even create an annual list of the top performing cities in this category each year. By using this resource, time spent on research can be eliminated, best practices can be easily identified, and certification in performance management could be attained.

⁴⁸ ICMA, "Certificates in Performance Management," <https://icma.org/certificates-performance-management>.

Table 3: Example Cities of the Five Departments and Dashboard Recommendation

Community & Family Resources	Housing & Neighborhood Development	Public Works	Planning & Transportation	Utilities	Dashboard
No Additional Cities	Fort Wayne, Indiana Raleigh, North Carolina	Burlington, Vermont Carmel, Indiana Colorado Springs, Colorado Palo Alto, California	Ho Chi Minh City, Vietnam Los Angeles, California	Olathe, Kansas San Diego, California Tampa, Florida Westminster, Maryland	Ho Chi Minh City, Vietnam

Revision of Goals for All Departments

In analyzing the cases of these five different departments, the Capstone team finds that there are still areas for improvement in terms of setting goals. Setting the “right” goals allows the Mayor and departments themselves to better monitor and evaluate performance. Since each department is unique, there is no perfect set of goals and indicators for all departments to follow. However, there are some questions directors should ask themselves while establishing goals, such as: What is the purpose of their work? Who are targeted? How to measure the success of their work? Are the goals SMART (specific, measurable, achievable, relevant, and time-bound)?

Experience from cities across the country indicates the need for continuous revision and development of performance measurements. Therefore, the Capstone team recommends that the revision of goals for all remaining departments should be implemented. An administrative policy should be established to guide the revision process. Also, utilizing help from outside such as another Capstone or a private consulting group can be helpful since it is not easy for a department to change the way it has been operating for years.

Making the Best Use of Trello

There should be additional training on the proper ways to use Trello to its utmost effectiveness. The presentation should set guidelines on Trello usage for each department and should be individualized to each department's goals and objectives. Important points that should be addressed in the presentation include: how to avoid having too many Trello boards, what data to upload to Trello, and how to keep Trello boards organized and up to date.

In addition, sessions should be provided to train employees on how to properly collect, record, manage, and utilize data. These sessions should tell what types of data to collect and how to evaluate data for each department. Emphasis should be given on KPIs, and the data collected should demonstrate KPI statistics. KPIs should be selected carefully to be relevant and important to promoting each department's goals and objectives. These training sessions should elaborate on how to keep this data well organized, easily accessible, and well-presented so the data is easy to understand and use.

Application of Other Technical Tools in Performance Management

An effective performance assessment system will provide City leaders with a comprehensive picture of the local economy and the operational efficiency of local government agencies and, thus, facilitate the evaluation the situation and make rational and timely decisions. In many countries in the world like the U.K., Australia, Chile, Colombia, India, Indonesia, Vietnam etc., the role of measurement, analysis, and tracking assists in improving the performance. Cutting down the operational costs of the government apparatus has been recognized by federal, state, and local leadership. Formulating and monitoring KPIs can be a simple, but effective method to improve performance efficiency and accountability of public servants. KPIs help the City convey its policy priorities and develop a roadmap for improving the performance of the public sector. Three determinant factors for the successful development of a performance assessment system are:

- Precision and reliability of data
- Best utilization of the analysis results reported by the performance assessment system in different stages of policy planning
- Constant update and timely adjustment of performance indicators and the performance assessment system to reflect changes of policy and visions

To obtain these results, it is essential to utilize the support of technological tools and solutions for performance management. In the following subsections are some solutions that the Capstone team proposes to all departments in Bloomington.

Solution 1: E-Office and Professional Software

Electronic Office, or e-Office, is the general terminology for a system that allows intra-office communication, monitoring of individual tasks and duties, management of task-flows within a Department, and processing of documents online. With many convenient and easy-to-use features

integrated— email, chat, poll, reminders, scheduling, announcement delivery, sending messages to a mobile phone, and flexible configurations— e-Office can meet the demands of all types of public and private organizations and even improve the workflows of such organizations.

This system will enable the organization's leaders to monitor the individual performance of staff and the staff themselves to track the progress of their performance by following the flow of any incoming and outgoing documents. The e-Office system will make notifications to the necessary people when the document is processed at any stage. At a higher level, e-Office also allows the City's and Department's leaders to monitor inter-departmental assignments, in which two or more Departments may have to coordinate to execute one single duty. The application of this system in the office will help liberate staff from old-school and less effective tools like Excel, Google Sheet, etc., as well as save a lot of time spent on physical meetings and periodic progress reports between staff and leader because all of this can be done and tracked on the e-Office system.

Professional software and solutions are also essential for collecting and analyzing data, especially complicated and difficult-to-manually-collect data, and inputting them to the performance assessment process. Today, some Departments have been equipped with professional software, such as Geographic Information System (GIS). The uniform application of professional solutions, nevertheless, should be further promoted across all Departments of the City, especially those having a direct impact on the performance assessment process, such as the citizens' feedback collecting system.

Solution 2: Performance Dashboard

To monitor the performance of a government agency, based on best practices, more and more agencies around the world are promoting the use of a "performance dashboard." This is a visual tool that makes it easy for the City to assess and monitor the strategic picture of the performance in Departments. By getting updated regularly (weekly, monthly, quarterly, and annually), the performance dashboard helps the City to timely track the implementation progress of the priority goals and directions from superiors. A performance dashboard will help promote a data-based and evidence-based policy-making process.

Based on lessons learned about performance management from a wide range of countries and cities in the world, from developed ones like the U.K. and Australia to developing one like Vietnam, and from a series of cities in the U.S., we found that an effective performance dashboard that is helpful for the City leadership in monitoring the Departments' performance should possess the following properties:

- A visual representation of performance of agencies: This can be done by using graphic charts and color schemes to distinguish positive and negative trends. This function will help the City leadership capture the progress of performance in a glance instead of spending time on reading periodical reports or analyzing complicated data provided by the Departments.
- The KPIs used in this dashboard are quantifiable and measurable goals to avoid subjective evaluations from intermediate levels.
- The dashboard provides a comprehensive depiction of an agency's performance and allows authorized individuals to update or access the data.

- The dashboard is integrated with a deep data analysis function that enables analysis of trends and data comparison in mid- and long-terms (5 years).
- The dashboard can exhibit details of individual performance indicators, including explanations of meaning, measuring methodology, reporting frequency, and other useful information.
- High frequency of dashboard data updates will allow leaders to track the progress of implementing goals and achieving the performance indicators on near real-time basis.
- The dashboard can deliver the message on the City’s policy priorities to the public.

Currently, the City of Bloomington is using a web-based [performance dashboard](#). However, compared to dashboard models that we have researched, this dashboard has shortcomings in its operation. First, the dashboard fails to provide the comprehensive picture of all Departments’ performance but instead just focuses on some indicators. Despite frequent updates, data analysis provided by the dashboard is not intensive enough to allow general users and leadership to identify development trends, compare the current situation with the past, or make predictions for the future.

A performance management system may function very well with effective identification of priority goals and performance indicators to measure such goals. We, however, believe the system will never be successfully implemented without an advanced tool to facilitate the monitoring and tracking of performance. One of the most important long-term recommendations that we would like to propose is to improve the use of a performance dashboard. The performance dashboard in shown in this report is a “Multi-layer sectoral performance dashboard” that is an example based on hypothetical data and modeled after Ho Chi Minh City, Vietnam.

Dashboard Overview

- General description: A web-based dashboard describing the performance of all Departments in Bloomington via visual illustration of goals and performance indicators.
- Coordination mechanism: the database and website are administered by the Mayor’s Office; each Department is assigned with one dashboard module (from layer 2).
- Scope: Performance of all 17 Departments
- Appearance: Dashboard consists of 86 dashboard pages representing 5 data layers of 17 Departments and Units. The dashboard also makes datasets available for download.
- Update frequency: weekly and monthly.
- Content: 5 layers of the dashboard present 5 different depth levels of data description.

Departments’ performance:

Layer 1: Visual descriptions of all Departments’ performance.

Layer 2: Visual descriptions of goals implemented by each Department.

Layer 3: Detailed descriptions of indicators used to track one certain goal.

Layer 4: Detailed descriptions of the progress of each indicator.

Layer 5: Detailed descriptions of the performance of each division indicator.

Dashboard Example

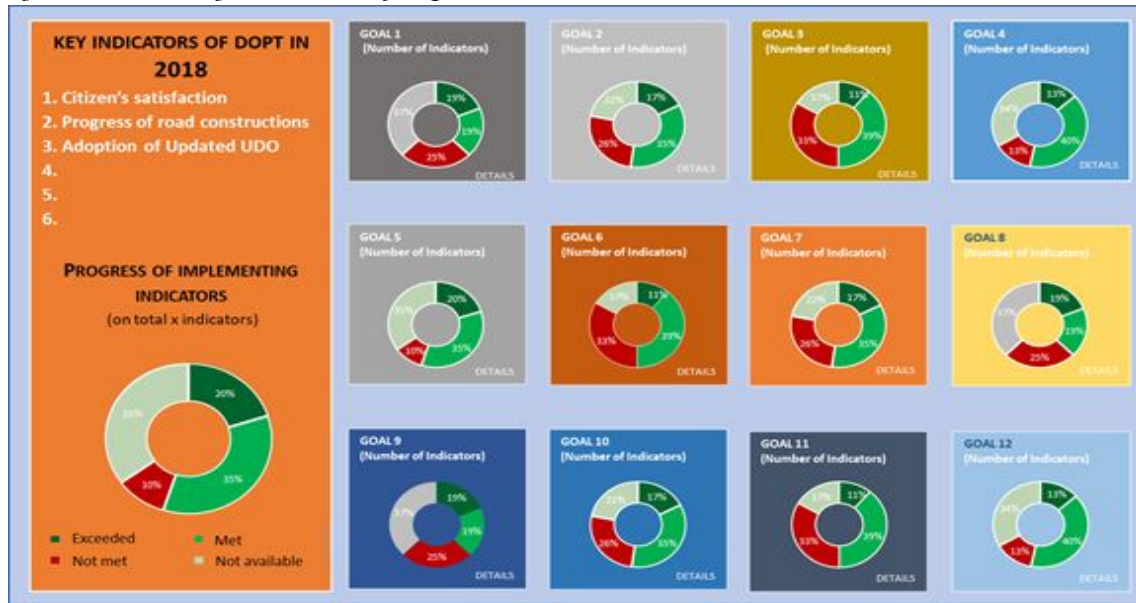
The dashboard model below is a prototype using hypothetical data to illustrate how an new dashboard could function in Bloomington. The Department of Transportation is used as an example department in several levels.

Layer 1: Mayoral



This layer will provide a holistic view of the ongoing performance of the City government illustrating the percentage of goals exceeded, met, or not met by each Department. By visual representation using the color scheme and pie charts, this dashboard lets City leaders know at first glance the performance status of the Departments (which ones are performing well, which are not). The message on the City’s priority policy will be delivered at this layer via the exhibition of the City’s key performance indicators.

Layer 2: For the Mayor and Head of Department



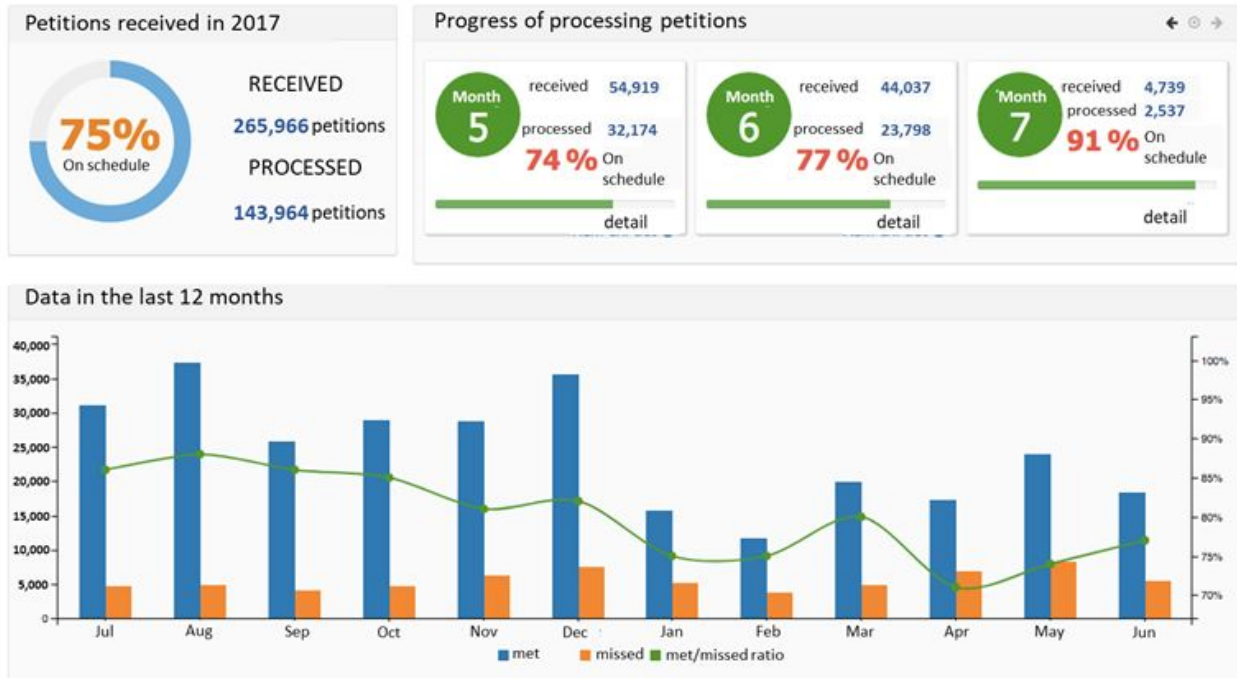
This layer will show how many goals that each Department has to accomplish in this year, and the implementation progress of each goal, which is measured by the percentage of relevant performance indicators exceeded, met, or not met. Similar to the first layer, visual representation of goals in this layer will help the leaders assess the current performance of a certain Department and project the results by the end of the year.

Layer 3: For the Head of Department



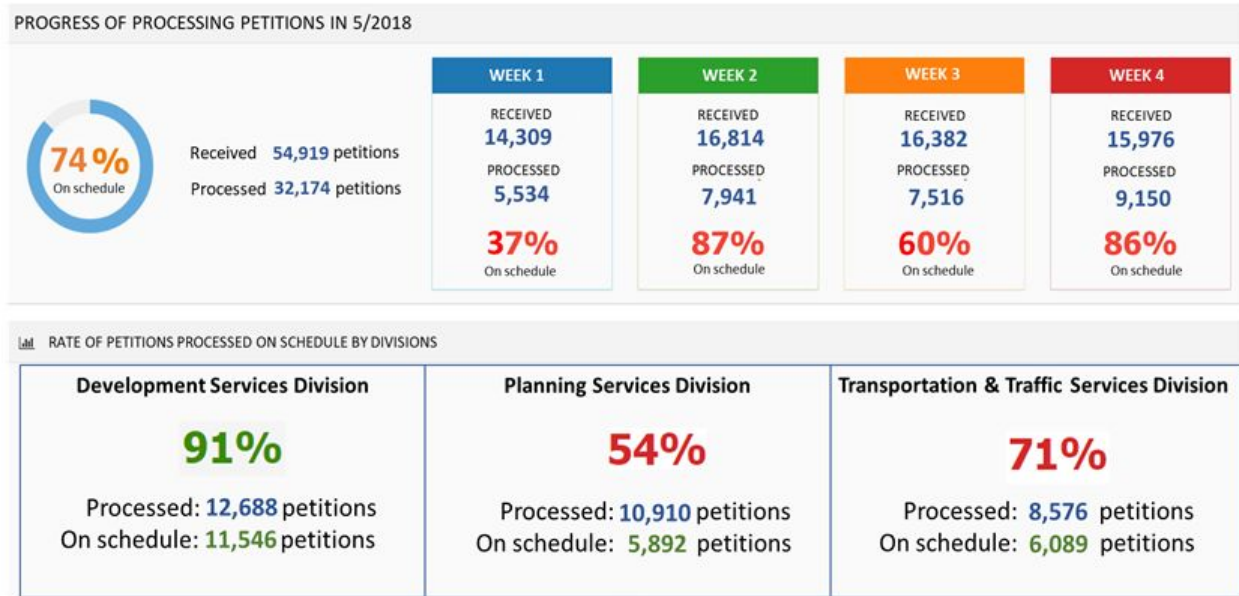
This layer displays progress over time for key performance indicators (KPIs) used to measure a goal. These key performance indicators will be measured by year to see if the Department is improving, stagnating, or getting worse. Examples of key performance indicators can include the percent of a particular objective achieved (such as the percent of potholes filled, the percent of petitions processed, the percent of fires responded to, or the number of new affordable housing units added) within a specified time frame. The progress of indicators in this layer is again depicted by consistent color scheme and graphic charts.

Layer 4: For the Head of Department



This layer shows the actual statistics of performance indicators. Here we take the indicator for the number of petitions processed as the example. This can be used to give more specific details to the indicators that require a more in-depth analysis than the previous layers offer. This can help to organize more specific data about individual goals when necessary, such as showing short-term progress and results.

Layer 5: For the Head of Department and Heads of Divisions



The last layer measures individual performance of responsible divisions for a specific performance indicator at a certain period of time. Data shown by this layer will inform the Department Head about what divisions are underperforming and specific progress the performance is. At this layer, the dashboard also makes the dataset of an indicator available for download.

For better clarity, layers 3 to 5 of this dashboard are customizable layers subject to the nature of the measured goals and relevant performance indicators. The statistic of “Processing Petitions” shown in this model is a typical example of a KPI that is used to measure recurring activities that are executed routinely. For this type of indicator, the dashboard can use data that is collected periodically to show the implementation progress with statistics, color scheme, or graphic charts, while comparing the performance of the department between months or years. However, there are activities for which the implementation progress does not precisely reflect the quality of performance, such as filling potholes; in January zero potholes are filled, and in the summer many are filled. For these activities, the progress cannot be tracked equally over the course of the year, therefore, the evaluation of the Department of Planning and Transportation could become skewed if their performance is evaluated as poor just because they had no potholes to fill before the summer. In this case, the dashboard layers can be customized to avoid the practice of misjudgment by (i) not including statistical or graphical comparison in short timeframes (monthly, weekly or quarterly), or (ii) by setting sensible performance indicators to better reflect the quality of performance rather than quantity. The latter could be explained by identifying “how quickly the Department responds to a pothole report” instead of “how many potholes are filled”. All in all, the function of this dashboard depends largely on what goals and indicators that departments want to track and what input data will be provided. Additionally, the overall purpose of this recommendation is to help departments identify what they really want to achieve from a Performance Dashboard, rather than to suggest them to mechanically apply this model to their current system.

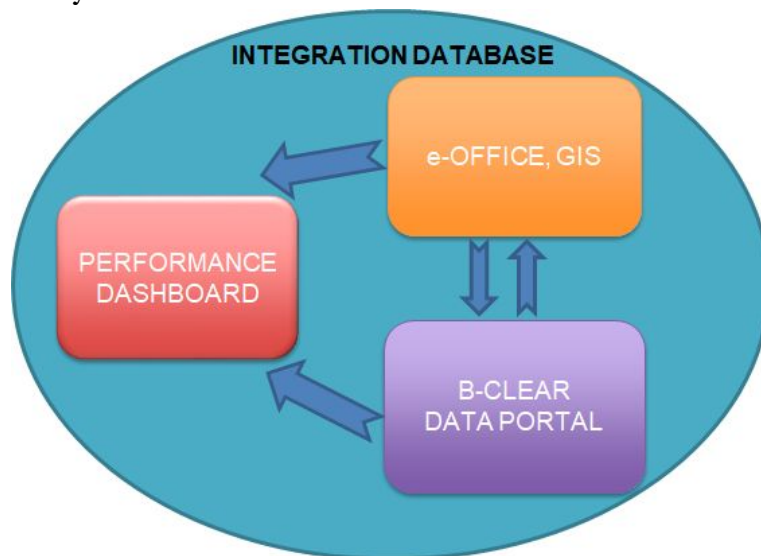
For the dashboard to properly function as described above, the first step that needs to be performed is loading raw data to the dashboard database. The raw data can be manually loaded by responsible staff of the Department if the data exists in a simple format. For instance, for the indicator of “Processing Petitions” illustrated in layers 4 and 5 above, the dashboard staff only have to input data regarding the received date and the processing date of the petitions. However, with an integrated system, this manual process can be entirely automated. The integrated system will be powered by an integration database that is a data store for multiple applications that allows the data to be integrated across these applications. In Figure 7, the integration database will allow the automatic transfer and update of data among three application groups: the dashboard, eoffice system and professional software, and the B-clear data portal which is the functional open data platform of the City.

Particularly:

- eOffice system and professional software can be set up to automatically and periodically transfer raw data for the performance dashboard and keep the dashboard data updated frequently.
- These applications also provide daily data that they collected and processed for the data portal for long-term archive.
- The portal data will provide the archived data for the dashboard as the baseline data for comparison of performance of a department through time.

This integrated system with integrated applications is expected to significantly improve the efficiency, accuracy, and quality of the performance management system for City government.

Figure 7: Integration System



Conclusion

The City of Bloomington is one of many municipalities around the country faced with the ability, desire, and challenge of creating, measuring, and reporting key performance indicators that accurately reflect the City's mission and strategic goals. Through various department-specific approaches all small teams aimed to create SMART budget goals, key performance indicators, and additional recommendations. This project's scope did not include an analysis of performance management in the City of Bloomington. However, the City-wide recommendations the Capstone produced are performance management recommendations in the short and long-term. The following three steps should be the 'next steps.'

Step 1: Create SMART Goals

In the short-term, the Mayor's office should have all Department Directors and staff work on creating SMART budget goals for the FY 2019 budget cycle. Departments should begin this process with client based programs, multi-year projects, and metric driven goals. SMART goals manifest as quantitative metrics, baselines, deadlines, and rhetoric. All SMART goals should start with an action word and be specific outcomes, not activities.

Step 2: Train Staff on Trello

The Mayor's office should also organize training on Trello for departments. Trello training could be done by internal staff members that act as a resource for training departments on all Trello features. External training instructors could also be considered.

Step 3: Investigate Data Integration

A greater understanding of Trello's capabilities can reduce the amount of manual data duplication between software systems. From conversations with staff across all five selected departments and reviewing publically available data for these departments, we recommend the City begin investigating data integration options. In a joint effort between the Mayor's office and IT Department, the extent to which Trello can be integrated with B-clear should be explored. Other data collection platforms used by the City such as Google Drive, should be integrated into Trello, if possible.

The City should also consider attaining the International City/Council Management Association (ICMA) Performance Management Certificate and view past recipient websites for ideas on how to visually represent performance metrics.⁴⁹

In the long-term, the City would greatly benefit from integrating existing software and datasets into a performance dashboard. The dashboard included in this report is an example of the state of the art tool for organizing performance measurements. Incrementally continuing to identify KPIs in all City departments with projects like this would give rise to a performance dashboard. With leadership from the Mayor's office both performance measurements and management are achievable. These steps give an important understanding to citizens, elected officials, and staff to understand the efficient and effective utilization of City funds tied to City budget goals.

⁴⁹ ICMA, "Certificates in Performance Management," <https://icma.org/certificates-performance-management>.

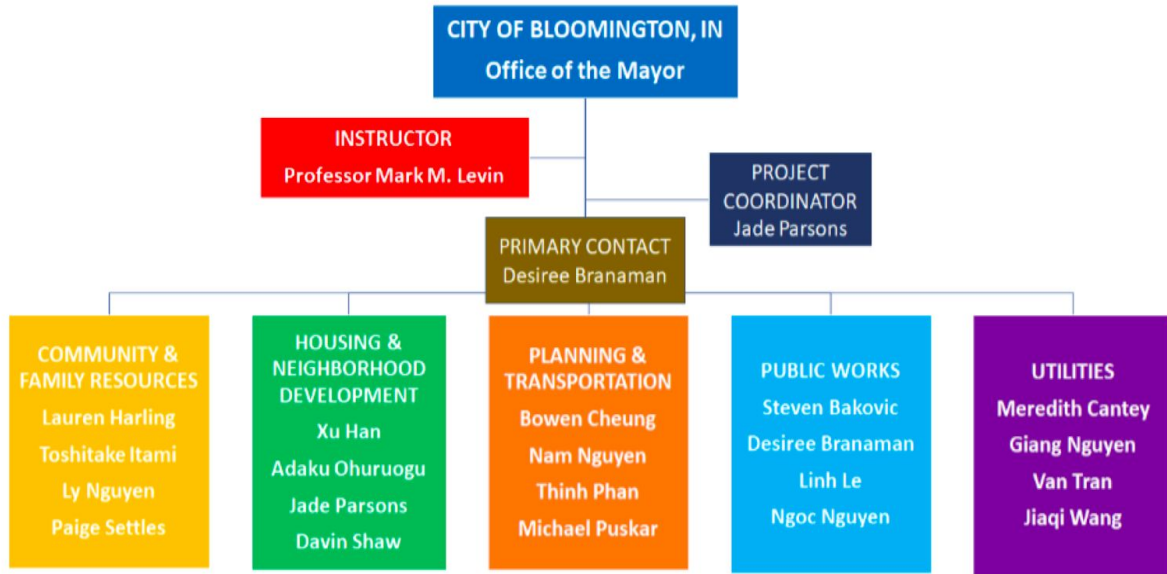
Appendix

Appendix A: Comprehensive Course Roster

Steven Bakovic
Desiree Branaman
Meredith Cantey
Bowen Cheung
Xu Han
Lauren Harling
Toshitake Itami
Linh Le
Giang Nguyen
Ly Nguyen
Nam Nguyen
Ngoc Nguyen
Adaku Ohuruogu
Jade Parsons
Thinh Phan
Michael Puskar
Paige Settles
Davin Shaw
Van Tran
Jiaqi Wang

Faculty Advisor: Mark M. Levin

Appendix B: Organization Chart of Team



Appendix C: CFRD Logic Models

How to Read Logic Models

Before each activity, we briefly explain how to read the logic model. As mentioned, we identified the activities and goals of CFRD based on the FY 2018 budget proposal. Each section of the budget proposal is divided into “Activity Descriptions” and “Goals.” Activity Descriptions is the general description including the purpose of the activities in the section. Goals indicate specific activities and their initial goals with the budget. Therefore, in applying those descriptions to the logic model, Activity Descriptions should be changed to long-term goals, and Goals should be called activities. Therefore, in the logic model, the “Activity Descriptions” are illustrated as boxes with a red frame, mainly in long-term goals, and the “Goals” are shown as boxes with a blue frame, mainly in activities.

Figure C1: Logic Model of “Engagement”

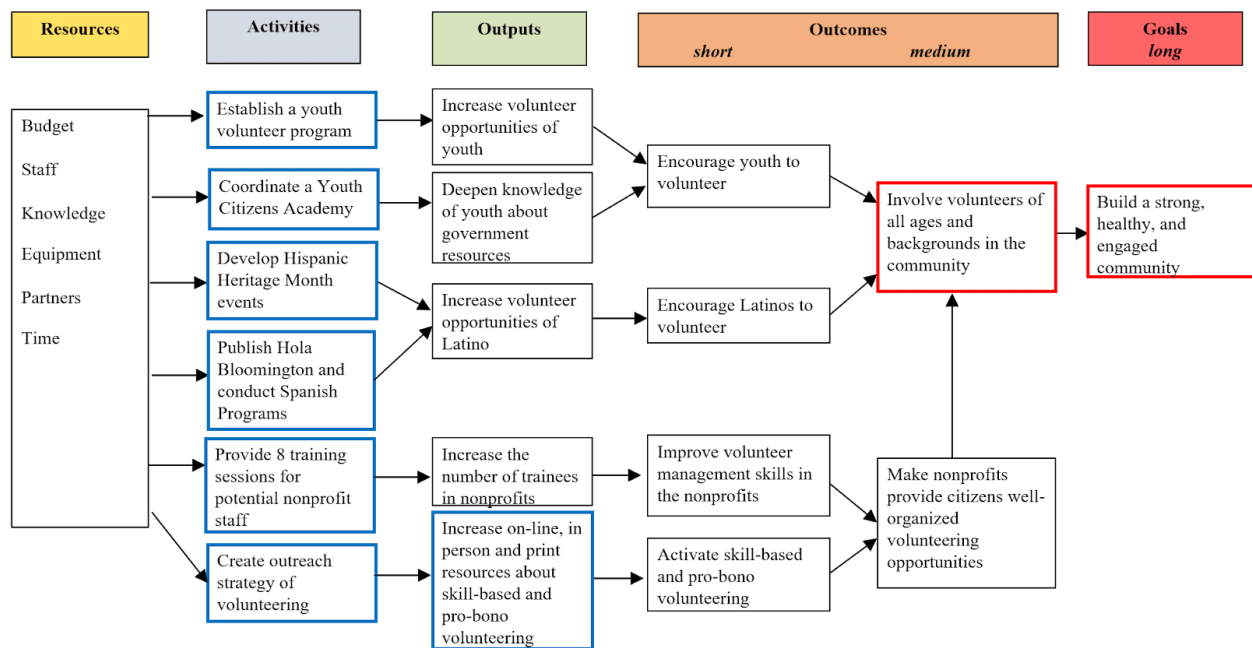


Figure C2: Logic Model of “Safety, Civility, and Justice”

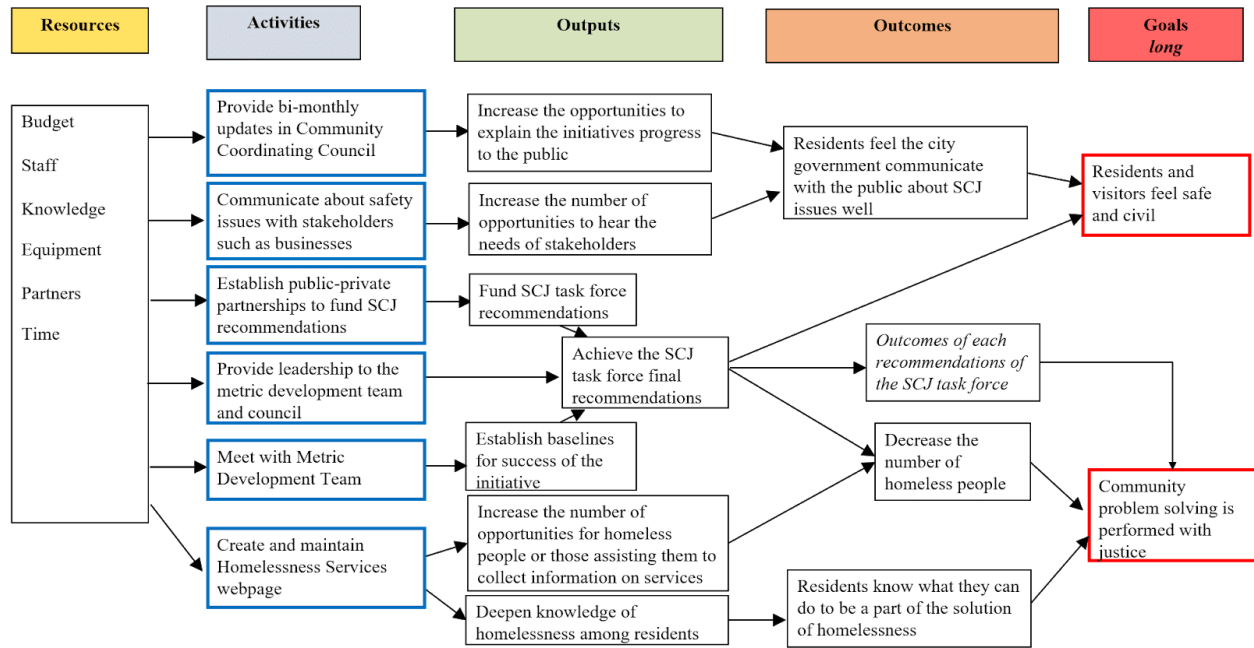


Figure C3: Logic Models of “Diversity”

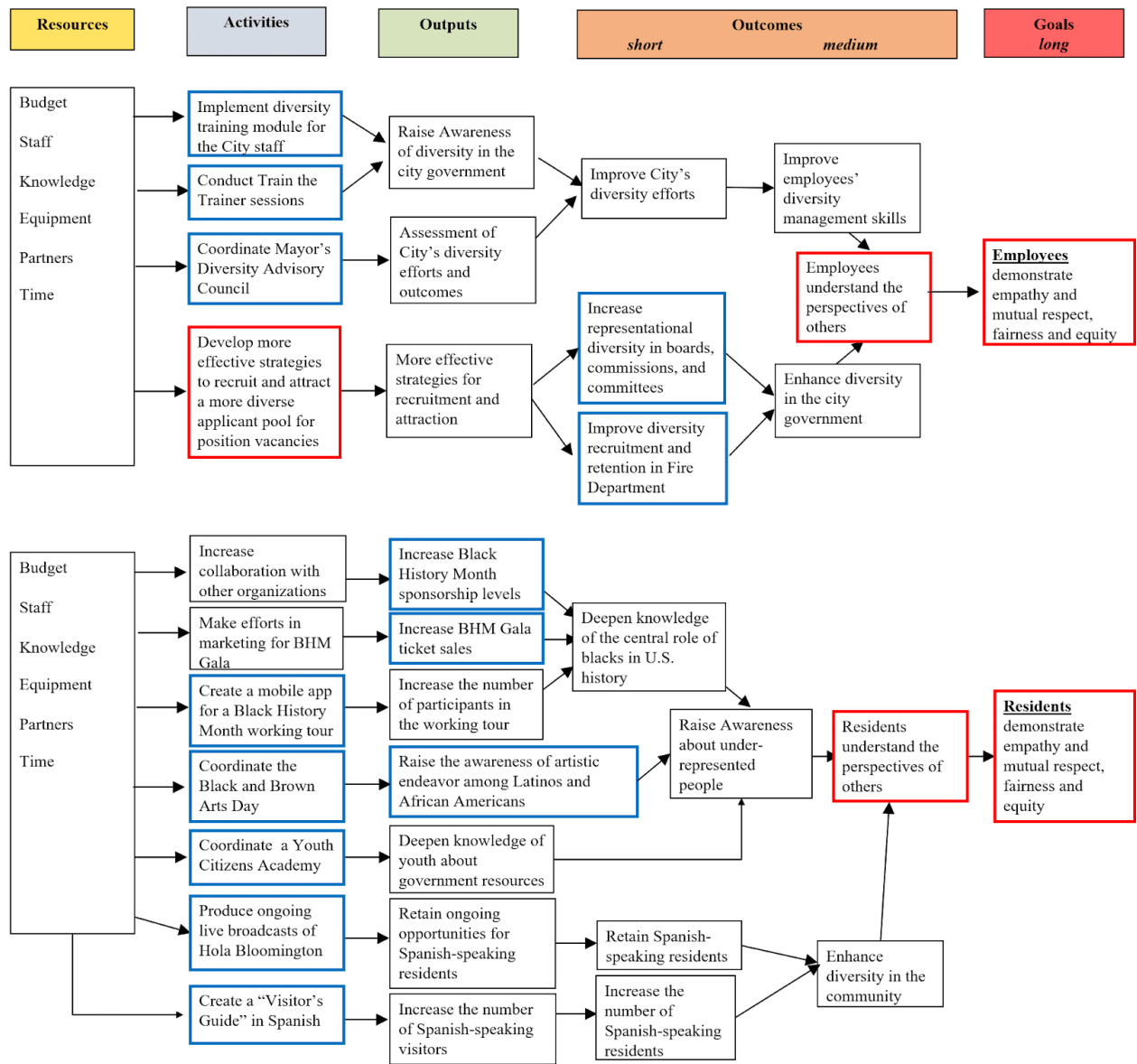


Figure C4: Logic Model of “Health Outreach”

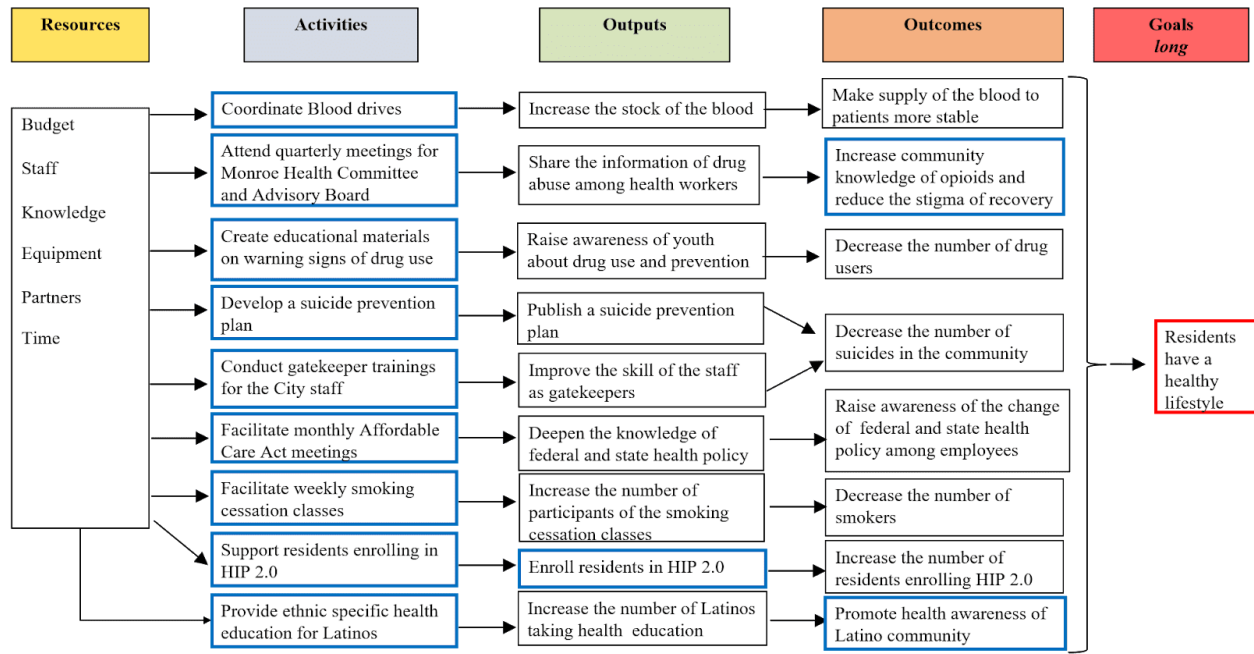


Figure C5: Logic Model of “Commission on Aging”

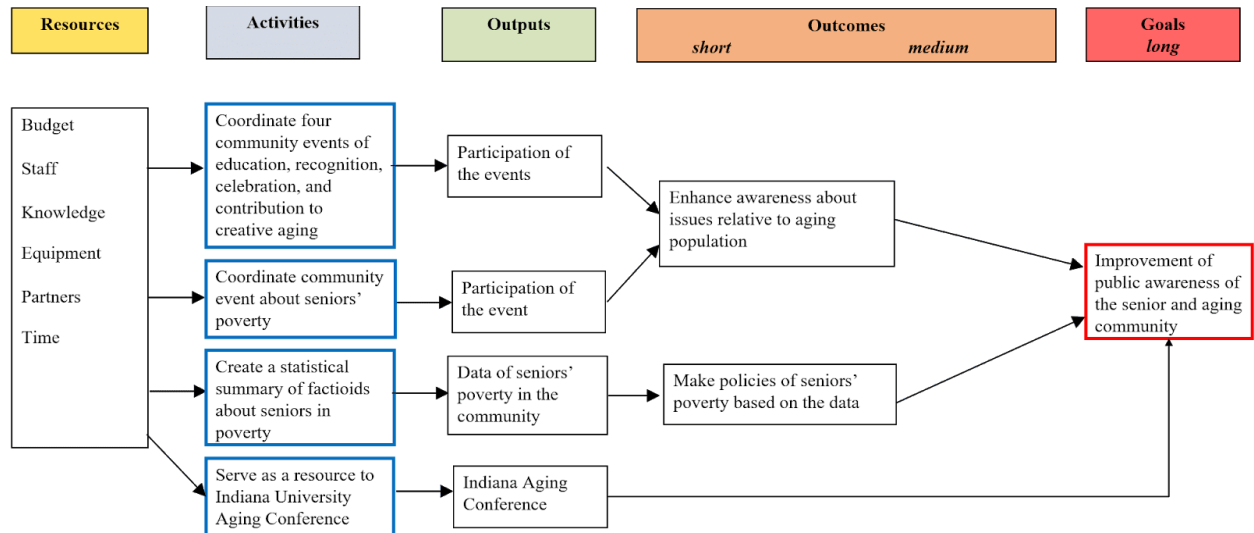


Figure C6: Logic Model of “Commission on Hispanic and Latino Affairs”

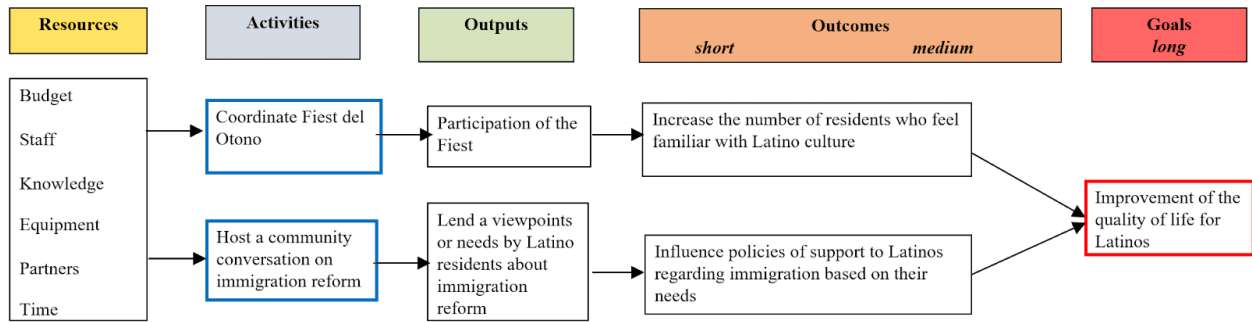


Figure C7: Logic Model of “Commission on Status of Black Males”

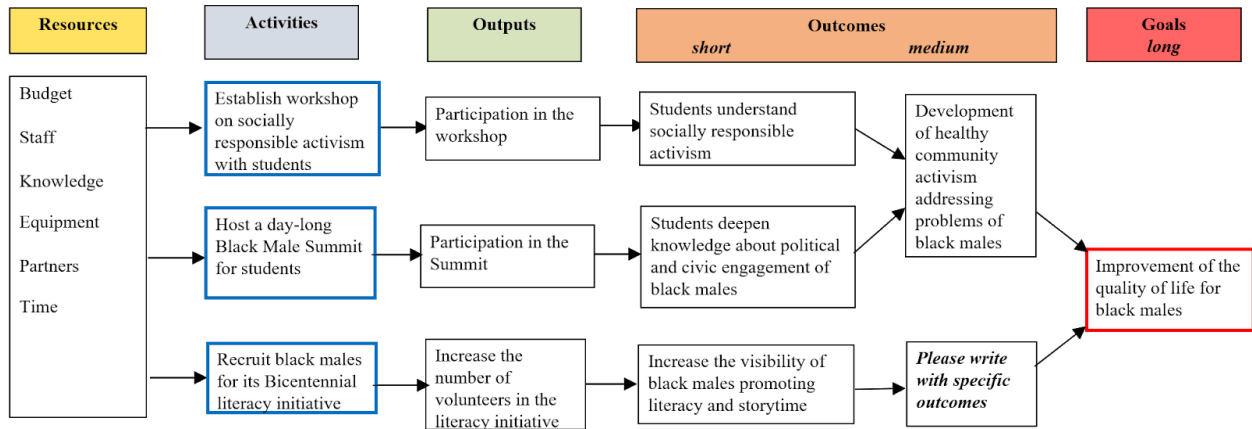


Figure C8: Logic Model of “Commission on the Status of Youth and Children”

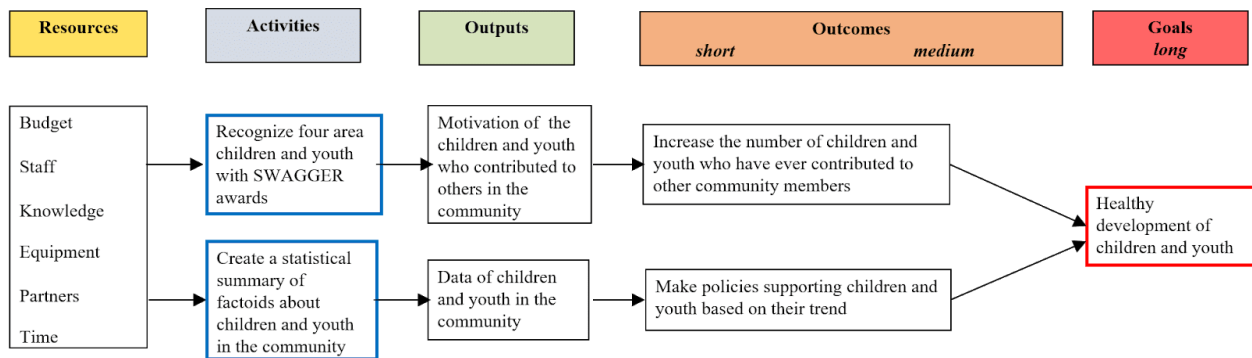


Figure C9: Logic Model of “Commission on the Status of Women”

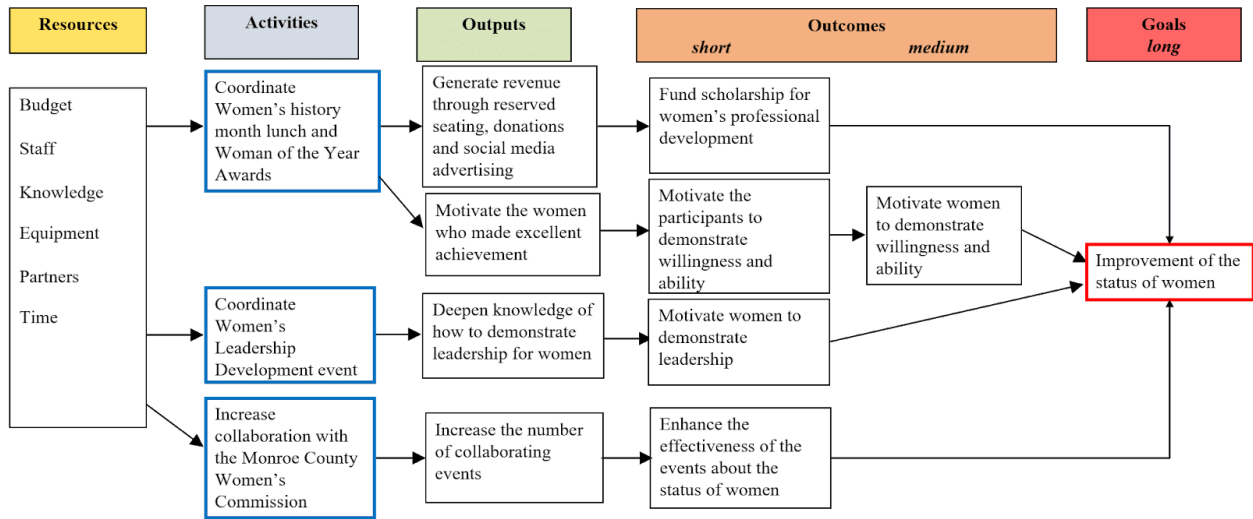


Figure C10: Logic Model of “Council for Community Accessibility”

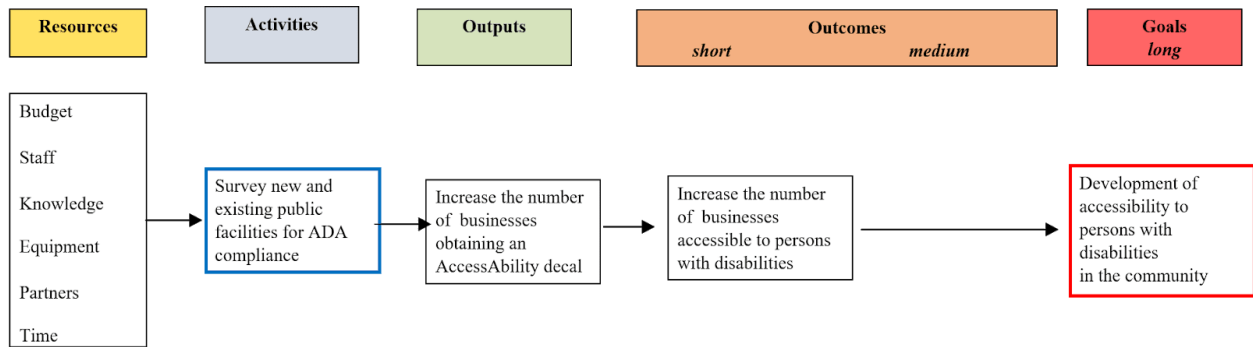
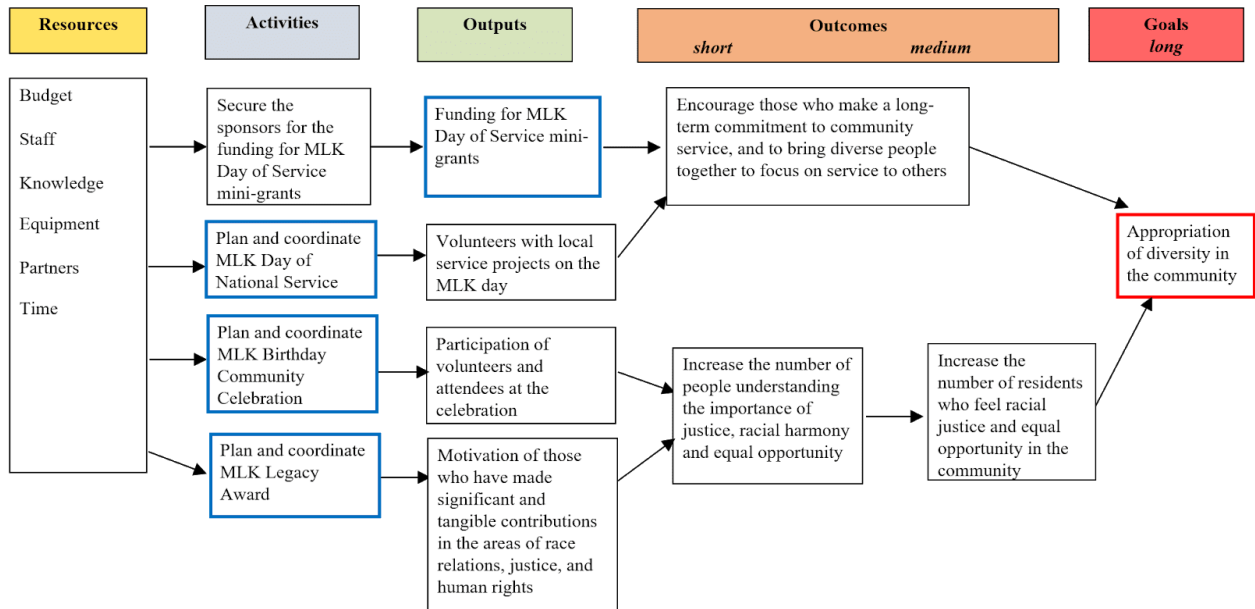


Figure C11: Logic Model of “Dr. Martin Luther King Jr. Birthday Celebration Commission”



Appendix D: Housing and Neighborhood Development

Figure D1: Filtering Citation Data

Search Citation Tickets

ID

Sort by To Legal Dept.

General Status

Complied Status

Legal Action

Inspector

Violation

Receipt No.

	First Name *	Last Name *
Owner:	<input type="text"/>	<input type="text"/>
Tenant:	<input type="text"/>	<input type="text"/>
Agent:	<input type="text"/>	<input type="text"/>

St # St Dir St Name St Type

Address

City State Zip Zip Ext

(mm/dd/yyyy) (mm/dd/yyyy)

Date To

Date Option Written Due Complied Paid Sent to Legal

Search
 Spread Sheet(Excel)**
 Generate Labels
 Generate Water Restriction Labels

* You can use part of the name such as 'job', 'john', 'son' in search for Johnson
 ** Intended to be used by inspectors on the field to lookup citations offline

Citation Reports

General Status

Complied Status

Inspector

Violation

mm-dd-yyyy mm-dd-yyyy

Date From: To:

- Statistics of citations per Inspector
- Statistics of citations per Status
- Statistics of citations per Violation Type
- CSV File Of the Citations

Figure D2: Example of Citation Case Numbers and Assignments

Case	Days Responsible	Date Assigned	Date Closed	Category	Assigned to	
158940	Eric Sade	10	4/28/2017	5/8/2017	Excessive Growth	Dee Wills
158949	Eric Sade	7	5/1/2017	7/20/2017	Trash	Matthew Swinney
158953	Eric Sade	7	5/1/2017	5/8/2017	Trash	Norman Mosier
158954	Eric Sade	7	5/1/2017	5/8/2017	Excessive Growth	Norman Mosier
158962	Eric Sade	6	5/2/2017	5/8/2017	Trash	Mike Arnold

Figure D3: Example of Citation Raw Dataset

service_request_id	requested_datetime	updated_datetime	closed_date	status	source	service_name	service_subtype	description	agency_responsible
6226	2010-06-16T04:00:00	2016-09-11T22:02:0	2010-06-16TC	closed	Other	Excessive Growth		Received compla	HAND
11397	2009-07-17T04:00:00	2016-09-11T22:02:0	2009-07-17TC	closed	Other	Excessive Growth		Intersection of Ri	HAND
16109	2008-08-05T04:00:00	2016-09-11T22:02:0	2008-08-05TC	closed	Other	Excessive Growth		High weeds - corner of Pine/Kirkwood	
21443	2007-08-16T04:00:00	2016-09-11T22:02:0	2007-08-16TC	closed	Other	Excessive Growth		Laurel from Publ	Information and Tec
23589	2007-05-24T04:00:00	2016-09-11T22:02:0	2007-05-24TC	closed	Other	Excessive Growth		Grass needs cut.	
25592	2006-06-07T04:00:00	2016-09-11T22:02:0	2006-06-07TC	closed	Other	Excessive Growth		properties to the	HAND
25676	2006-05-16T04:00:00	2016-09-11T22:02:0	2006-05-16TC	closed	Other	Excessive Growth		Yard Overgrown	HAND
25677	2006-05-16T04:00:00	2016-09-11T22:02:0	2006-05-16TC	closed	Other	Excessive Growth		yard Overgrown	HAND

Figure D4: New Citation Entry in Citation Query

New Citation

Violation Location

Address

St Num	St Dir	St Name	St Type	Sud Type	Sud Num
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
City					
<input type="text" value="Bloomington"/>	<input type="text" value="IN"/>	<input type="text" value="4740"/>	<input type="text" value="-"/>		

Owner Info

Name

First	Last/Business
<input type="text"/>	<input type="text"/>

Address

St Num	St Dir	St Name	St Type	Sud Type	Sud Num
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
P O Box					
<input type="text"/>	<input type="text"/>				
RR					
<input type="text"/>	<input type="text"/>				
City					
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Agent Info

Name

First	Last/Business
<input type="text"/>	<input type="text"/>

Address

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P O Box					
<input type="text"/>	<input type="text"/>				
City					
<input type="text" value="Bloomington"/>	<input type="text" value="IN"/>	<input type="text" value="4740"/>	<input type="text" value="-"/>		

Violation Details

Legal Description

Violation

Amount \$

Citation Type

Written Date

Compliance Date

Due Date

Inspector

Date Complied

General Status

Complied Status

Lease received: (for rented units)

Date Sent Date Received

To Legal Dept:

Legal Action

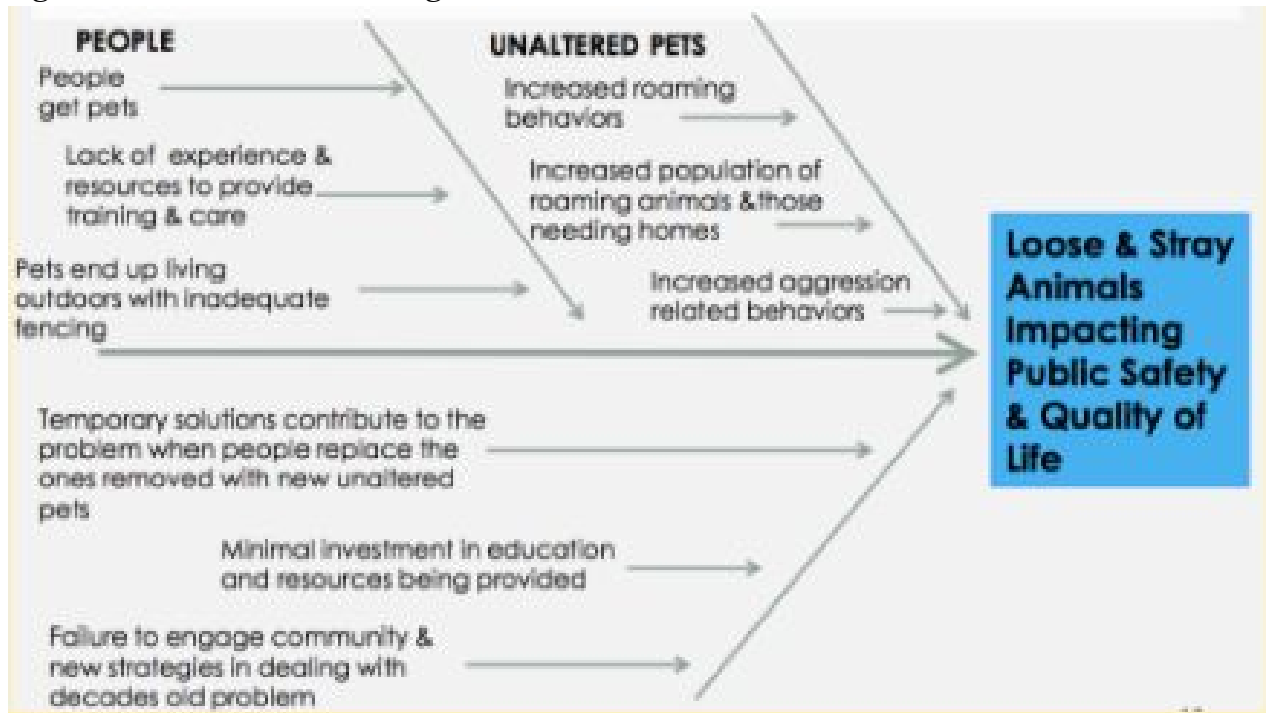
Notes

Appendix E: Public Works

Figure E1: Sample Template to Assess Performance over the Years

No.	Activity Measures	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY2019 Target
Fleet Maintenance						
KPIs						
1	Rate of Fleet preventative maintenance on-time service completion per month (%)					
2	Rate of vehicles or machines available at the end of the month (%)					
3	Rate of emergency service completed within 24h (%)					
Additional KPIs						
4	Rate of complaints solved (%)					
5	Cost of maintenance services (USD)					

Figure E2: Causes of Loose Dogs



Source: Dallas Animal Services Budget & Metrics

Figure E3: Example of Intake Metrics

- ✓ Beginning shelter count at the start of the reporting period.
- ✓ All live intakes, including “owner requested euthanasia” but excluding animals brought to a shelter’s medical clinic for procedures such as vaccines or sterilization where it was understood that the animal was going to be retrieved following the medical procedure.
- ✓ Animals killed, including “owner requested euthanasia.”
- ✓ Deaths in kennel/foster.
- ✓ Animals who are stolen, missing, and unaccounted for.
- ✓ Animals adopted.
- ✓ Animals transferred to rescue groups, other shelters, and wildlife rehabilitators.
- ✓ Animals reclaimed by their families.
- ✓ Animals diverted to a TNR program who were not social with people.
- ✓ Animals diverted to an RTF program who were social with people.
- ✓ Animals transferred in from outside of the jurisdiction and their dispositions.
- ✓ In jurisdictions which allow animals to be sold for experimentation, the number of animals of each species who were transferred to, placed, and sold for purposes of experimentation or similar purpose.
- ✓ Animals on hand at the end of the reporting period.

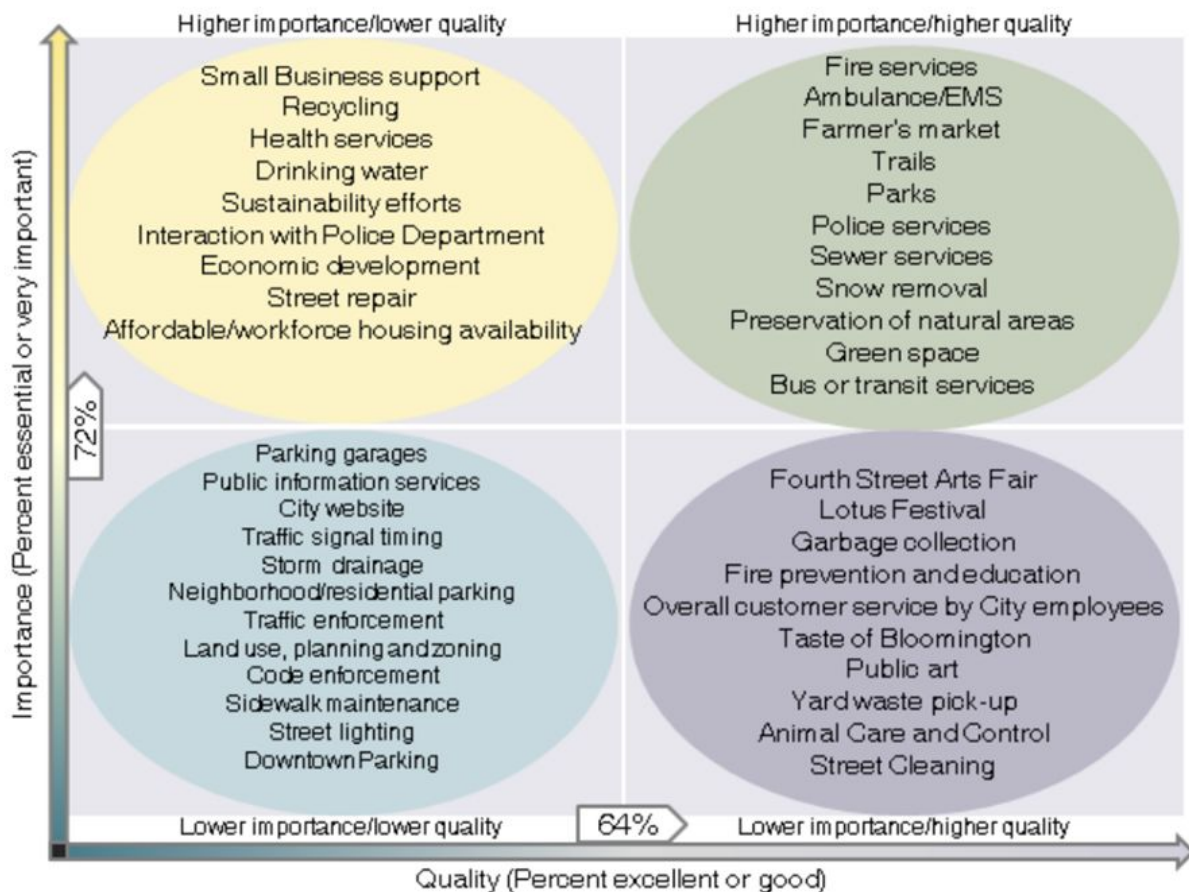
Source: Dallas Animal Services Budget & Metrics

Figure E4: Rate of Vehicles/Machines Available per Year

Activity Measures	2014	2015	2016	2017
Rate of Vehicles available	100%	100%	100%	100%
Number of Light Duty Vehicles	275	275	277	291
Number of Medium Duty Vehicles	46	46	46	46
Number of Heavy Duty Vehicles	45	45	45	47
Total Vehicles	366	366	368	384
Rate of Equipment available	100%	100%	100%	100%
Number of Light Duty Equipment	38	38	38	38
Number of Medium Duty Equipment	85	85	85	85
Number of Heavy Duty Equipment	31	31	31	31
Total Equipment	154	154	154	154

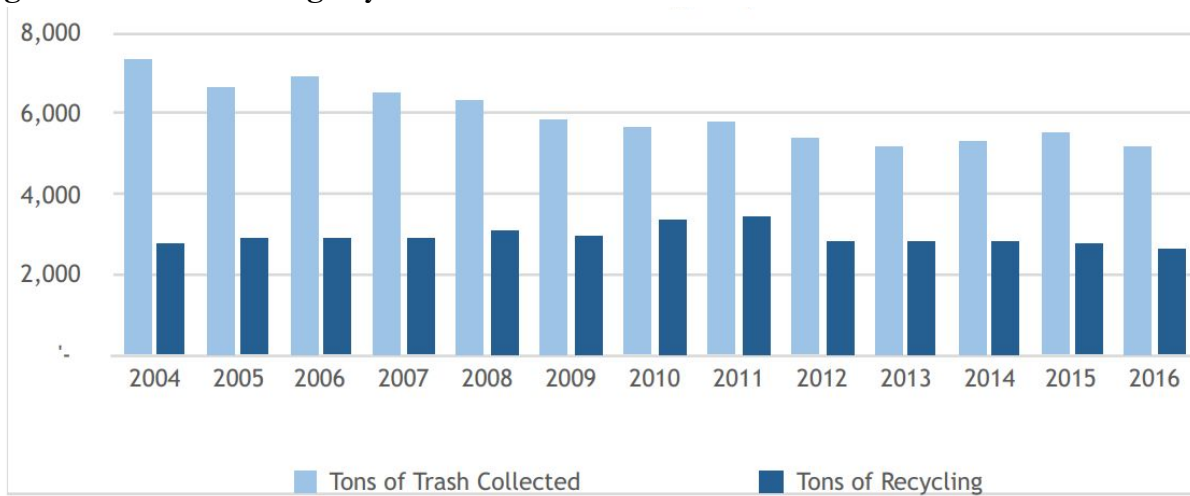
Sources: Public Works Department, City of Bloomington, IN

Figure E5: Comparison of Quality and Importance Ratings



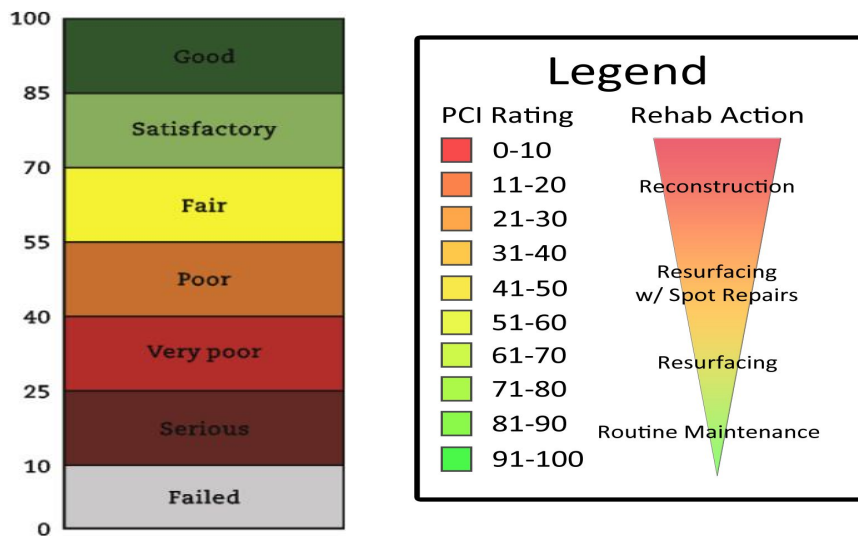
Source: Report of Results 2017 Community Survey, City of Bloomington

Figure E6: Waste Tonnage by Year



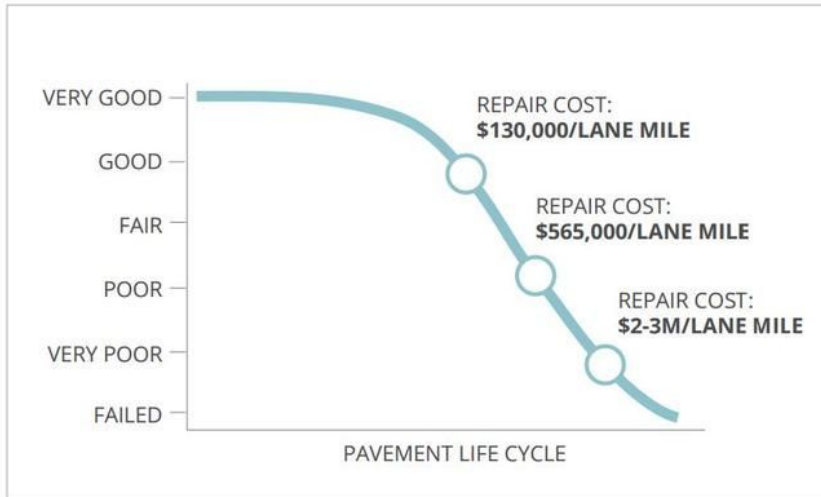
Source: Sanitation Modernization Plan - Final report to Mayor John Hamilton, 2017
<https://bloomington.in.gov/sanitation/modernization/plan>

Figure E7: Pavement Condition Index Ratings and Associated Rehab Actions



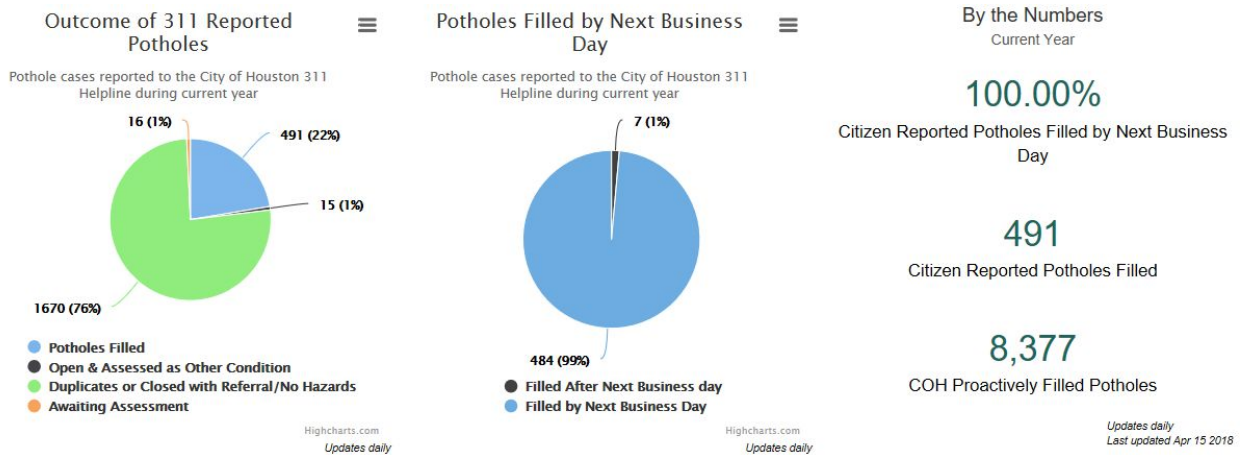
Source: PAVER Software Description. <http://www.paver.colostate.edu/Paver.php>; City Street Condition Map: Dallas, OR - Official Website. Accessed April 07, 2018. <http://www.dallasor.gov/739/Street-Condition-Map>.

Figure E8: Repair costs per lane mile as PCI decreases in Portland, OR



Source: "Pavement Maintenance Policy." Back to Basics RSS. June 27, 2016. Accessed April 07, 2018. <https://www.portlandoregon.gov/transportation/article/453877>.

Figure E9: Assessing and Addressing Citizen Reported Potholes by the Next Business Day



Source: The City of Houston. houstonpotholes.org.

Appendix F: Benchmark Cities and Departments

Cities

[City of Ann Arbor, Michigan](#)

[City of Asheville, North Carolina](#)

[City of Austin, Texas](#)

[City of Burlington, Vermont](#)

[City of Carmel, Indiana](#)

[City of Colorado Springs, Colorado](#)

[City of Fort Wayne, Indiana](#)

[Ho Chi Minh City, Vietnam](#)

[City of Los Angeles, California](#)

[City of Olathe, Kansas](#)

[City of Palo Alto, California](#)

[City of Portland, Oregon](#)

[City of Raleigh, North Carolina, - Housing and Neighborhoods Department](#)

[City of San Diego, California](#)

[City of Tampa, Florida](#)

[City of Westminster, Maryland](#)

Departments

[Fire Department, City of Bloomington](#)

[Parks and Recreation Department, City of Bloomington](#)