

# **Assessment of the Development Process**

## **TOWN OF BLACKSBURG, VIRGINIA**



**October 28, 2016**

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## **1. INTRODUCTION AND EXECUTIVE SUMMARY**

This initial chapter of the report introduces the approaches utilized in this study and summarizes key findings, conclusions and recommendations to be found in this report.

### **1. INTRODUCTION**

The Matrix Consulting Group was hired to conduct an evaluation of the development process for the Town of Blacksburg, Virginia. This study focused on review, permitting, and inspections activities in the Town's Planning and Building Department as well as the role of the Engineering Department in reviewing, approving, and inspecting development projects. The purpose of the study was to assess the performance, efficiency, and customer service associated with the following processes:

- Administrative development review (site plan and subdivisions).
- Building permit review and issuance.
- Engineering review (including stormwater and erosion control) associated with both planning and building approvals.
- Inspection and project completion, including issuance of certificate of occupancy.

Based on this assessment, the consultants developed a set of recommendations for changes in technology, staffing, process, and organization aimed at improving operations while ensuring that the Town's objectives of safe, appropriate development are not compromised.

The public hearing and board approval process was not included in the study although the consultants did take into account the work and findings of the Town Business Climate Task Force, which addressed some similar issues.

## **2. STUDY METHODOLOGY**

As part of this study the project team conducted the following activities:

- Detailed interviews with all staff in the Planning and Building Department, Engineering Department, and Information Technologies;
- Collected and analyzed data and sample reports regarding the services provided, the volume of work staff has to manage, and the time frames in which the work is completed;
- Conducted an employee survey, which provided all staff an opportunity for additional input into the process;
- Conducted a stakeholder survey to collect input from permit applicants regarding their experiences with the permitting process;
- Held a series of stakeholder workshops and meetings to obtain direct input from various applicant groups regarding the strengths and weaknesses of the permitting process; and
- Completed a best practices comparison that gauged the current practices in the department against a set of “best management practices.”

These process components provided an in-depth understanding of the Town’s permitting operations and served as the foundation for conducting an analysis of the improvement opportunities for the Town of Blacksburg.

## **3. KEY STRENGTHS**

Several aspects of the Town’s permitting operations are exemplary. Examples are as follows:

- The Planning department uses a project manager approach to plan review, which provides a single point of contact for applicants through out the review process, including distribution of plans to different reviewers / agencies for comment, consolidation of comments for presentation to the applicant, and management of the re-submittal process.
- The Department uses a single software program to track planning and building permits from time of application through issuance of the Certificate of Occupancy. This enhances communication among reviewers and allows any staff member to easily look up the status of a plan review, as well as any issues

that have been identified.

- All key permitting functions are located in a single building. This approach facilitates communication and information sharing among staff and provides a convenient single location for applicants dropping off applications or coming to the Town to ask questions.
- Employee interviews and surveys within the two primary departments indicate high morale and pride of work on the part of employees. 77 percent of employees agreed with the statement “The mission / purpose of this organization makes me feel my job is important.”

These existing strengths provide a foundation for increasingly sound operational practices and future efficiency improvements in the Town’s development review and inspection processes in particular and the provision of all services in general.

While a key finding is that current staffing requirements are generally sufficient to provide services, if the Town desires to significantly enhance service levels by reducing plan review times, it will require an increase in either staffing or contractual resources to accomplish this effort. The majority of recommendations contained in the report are designed to provide a more consistent level of service and promote a culture of service and partnership with the development community through increased public educational materials, enhanced online and technological solutions, process modifications to provide a more streamlined and efficient outcome for applicants.

#### **4. SUMMARY OF RECOMMENDATIONS**

The following table provides a summary of the key findings and recommendations contained within this report. Recommendations are listed in the order they appear in the report. The suggested timeframe for implementation takes into consideration the relative priority of the item and the ability to implement. Some items, while perhaps higher priority for improvement, can only be implemented after certain

other recommendations have been implemented.

Rec. #	Section	Recommendation	Priority	Suggested Timeframe	Estimated Cost
<b>Process Management and Performance Reporting</b>					
1.	2.1	The Town should track review times and resubmittals for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make decisions regarding resource deployment and workload management.	High	4 <sup>th</sup> Quarter, 2016	Staff time
2.	2.1	The Department should develop more detailed monitoring reports on inspections volumes and inspections scheduling and use this to track and address delays.	High	4 <sup>th</sup> Quarter, 2016	Staff time
3.	2.2	The Department should adopt a 45 calendar day review time for initial applications and 20 calendar day review time for resubmissions for Planning applications.	Medium	1 <sup>st</sup> Quarter, 2017	Staff time
4.	2.2	The Department should adopt a target review times for building permits ranging from 1 to 30 calendar days for most projects – depending on project type and complexity, with a maximum of 60 calendar days for major commercial projects.	High	1 <sup>st</sup> Quarter, 2017	Staff time
5.	2.2	The Department should adopt a standard of providing building inspections available within one day of request.	High	1 <sup>st</sup> Quarter, 2017	Staff time
6.	2.2	The Town should develop a contingency plan that includes the use of external resources or overtime, when they are unable to complete plan review and inspection workloads within required timeframes.	Medium	1 <sup>st</sup> Quarter, 2017	Unknown – dependent on approach and bids received

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Rec. #	Section	Recommendation	Priority	Suggested Timeframe	Estimated Cost
7.	2.2	The Town should secure professional plan review and inspections help for major construction projects and during the summer peak building season to prevent departmental staff from becoming overwhelmed and to ensure that timelines are maintained across the board. The cost of this plan review should be borne by the applicant through fees.	High	1 <sup>st</sup> Quarter, 2017	Unknown – dependent on approach and bids received
8.	2.2	Performance targets and actual performance should be placed on the Town's web site.	Medium	2 <sup>nd</sup> Quarter, 2017	Staff time
9.	2.3	Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and flexibility where feasible.	Medium	Ongoing	Staff time
10.	2.4	All staff members should be directed to create a desk manual for each position, outlining day to day, weekly, and monthly duties for that position, including key information needed to carry out their duties. This manual should be reviewed and revised on an annual basis.	Medium	2017	Staff time
<b>Technology Utilization</b>					
11.	3.1	The Town should begin to transition paper processes to electronic by taking greater advantage of the capabilities of the Town's software system.	Medium	2017	Staff time
12.	3.1	Staff should participate in training to learn how to use the software to its full capabilities including developing the detailed performance reports.	High	2017	\$4,000
13.	3.1	The Town should ensure that all employees receive permit software training, as well as annual refresher training.	High	Ongoing	Initial cost listed in above recommendation. Ongoing annual training estimated at \$2,000.

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Rec. #	Section	Recommendation	Priority	Suggested Timeframe	Estimated Cost
14.	3.1	The Town IT department should help the Departments develop and implement a legally acceptable standard for electronic signatures and seals for permit applications, plans, and related documents.	High	1 <sup>st</sup> Quarter, 2017	Staff time
15.	3.2	The Town should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.	High	2017	\$20,000 (one time) and \$4,000 annually
16.	3.3	The Town should implement a pilot program for electronic plan mark-up and eventually deploy electronic plan mark-up for all reviewers.	Medium	2017	Staff time
17.	3.4	The Town of Blacksburg should implement tablet or laptop use for all field inspections.	High	2017	\$17,000 (one time implementation cost) and \$4,500 annually
<b>Applicant Requirements and Resources</b>					
18.	4.1	An increase in the dialogue between the Town and the Development and Business Community should be adopted including quarterly training and meetings, newsletters, and frequent outreach for input.	High	1 <sup>st</sup> half, 2017	Staff time
19.	4.1	The Town should conduct an annual and ongoing customer satisfaction survey.	Medium	Ongoing	Staff time
20.	4.2	The Town should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public's understanding of the process.	Medium	By end of 2017	Staff time (\$15,000 if contracted out)
21.	4.3	Application forms should be updated to fillable PDF format and made available online for customers to complete and print out.	High	1 <sup>st</sup> Half, 2017	Staff time



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Rec. #	Section	Recommendation	Priority	Suggested Timeframe	Estimated Cost
22.	4.4	Staff should document interpretations of local codes, building code, and internal policies and procedures and make these available to the public on the Town's website.	Medium	2 <sup>nd</sup> Half, 2017	Staff time
23.	4.4	Where feasible, the Town should develop example specifications and details for common installations that have historically been problematic for applicants to clearly outline required and preferred materials, installation approaches, etc.	Medium	2 <sup>nd</sup> Half, 2017	Staff time
24.	4.5	The Town should continue to update and centralize all permitting information on the web site. One staff member should be tasked with periodically reviewing material and ensuring that it is current.	High	1 <sup>st</sup> Half, 2017	Staff time
<b>Development Process Modifications</b>					
25.	5.1	The Town should use a pre-application process to provide high-level, early feedback to the applicant regarding their project. This may be required for certain project types. A written summary of the key points discussed and agreed upon should be provided to the applicant at the conclusion of the meeting.	High	1 <sup>st</sup> Half, 2017	Staff time
26.	5.1	The assigned Project Manager should conduct a completeness review of the application and only accept applications that are ready for review.	High	1 <sup>st</sup> Half, 2017	Staff time
27.	5.1	DRC distribution list should be created for email distribution of new applications.	High	1 <sup>st</sup> Half, 2017	Staff time
28.	5.1	DRC meeting agendas should be distributed a minimum of three days prior to DRC meeting.	Medium	1 <sup>st</sup> Half, 2017	Staff time
29.	5.1	Create electronic file folder for all new applications and allow access to all DRC members.	Medium	1 <sup>st</sup> Half, 2017	Staff time
30.	5.1	All DRC members should be required to comment on applications or state that they have no comment.	High	1 <sup>st</sup> Half, 2017	Staff time

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Rec. #	Section	Recommendation	Priority	Suggested Timeframe	Estimated Cost
31.	5.2	Create and implement comment letter guidelines and identify Planning and Engineering staff member to review comments before transmittal to the applicant.	High	1 <sup>st</sup> Half, 2017	Staff time
32.	5.3	The Engineering Department should ensure that it provides review comments at a consistent level of detail across disciplines.	High	1 <sup>st</sup> Half, 2017	Staff time
33.	5.4	Work with local stakeholders to assess the feasibility of implementing a separate land disturbance permit for selected larger projects and establish specific criteria regarding which projects would qualify for this process.	Medium	By end of 2017	Staff time
34.	5.5	The Building Department should develop and implement a program to outsource major projects and peak inspections that typically occur in the late summer.	High	Ongoing	Dependent on bids received.
35.	5.5	Ensure that re-inspection for minor, non-safety failed items are re-inspected within one day to avoid causing construction delays.	High	2107	Staff time

Discussion and rationale for each of these recommendations is contained in the following chapters.

## **2. ANALYSIS OF PROCESS MANAGEMENT AND REPORTING**

This chapter provides an evaluation of the oversight, management and organization of the Development process with key recommendations for improvement.

### **1. THE TOWN SHOULD MORE CLOSELY TRACK TURNAROUND TIMES AND OTHER PERFORMANCE METRICS FOR BOTH PLANNING AND BUILDING.**

The town has target turnaround times for both planning applications and building permits and provides some high-level reporting on work volumes and performance. However, the information and level of detail currently provided is not adequate to identify and address performance or staffing issues.

The tables below are the current performance report prepared by the department:

#### **Planning – Site Plan**

<b>Site Plan Review Timelines</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Within statutory deadline (60 days)	100%	100%	98%	100%	100%	100%	100%
Within 45 days	93%	95%	86%	91%	86%	94%	91%
Within 30 days	62%	75%	58%	53%	69%	50%	61%

#### **Building Permits - All**

<b>Building Permit Issuance</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Issued Same Day	66%	52%	54%	55%	55%	37%	53%
Issued within 1 Day	79%	74%	76%	80%	80%	62%	75%

These reports provide a highly aggregated level of information; also, much of the information that would be useful to managers and the public is not present. Key recommended additions include:

- Provide data by type of permit / approval (in particular distinguishing between initial review and review of resubmitted plans).

- Provide more detail regarding timelines: from initial review to first comment letter, number of re-submissions, and total time from application to issuance.
- Include volume and workload data.

Below is a recommended format for a Planning performance report. It is recommended that the information be compiled monthly, but that the Town's software system reporting be configured so that this report can be issued for any date range.

<b>Planning Permit Performance Report</b>					
<b>Date Range:</b>					
<b>Permit Type</b>	<b>Number of Applications</b>	<b>Average First Review (Days)</b>	<b>Average Application Total (Days)</b>	<b>Average Re-submissions</b>	<b>Number Issued</b>
		<i>Includes review days by other departments.</i>	<i>Application to Issuance or completion of staff review (includes time when applicant is revising documents)</i>	<i>Average number of times permit type is re-submitted for staff review.</i>	
<b>Subdivision</b>					
<b>Site Plan</b>					
<b>Lot Line Adjustment</b>					
<b>Sign Permits</b>					

The Department should issue a similar report for building permits. Distinguishing between types of permits is especially important given the large variations in complexity and scope of projects, from large student housing, multi-family projects to single family residential plumbing permits.

Building Permit Performance Report					
Date Range:					
Permit Type	Number of Applications	Average First Review (Days)	Average Application – Issuance (Days)	Average Re-submissions	Number Issued
		<i>Includes review days by other departments.</i>	<i>Application to Issuance (includes revision time by applicant)</i>	<i>Average number of times permit type is re-submitted for review.</i>	
New Commercial Construction					
Commercial Addition					
Commercial Remodel					
New Residential Construction					
Residential Addition					
Residential Remodel					
Trade (electrical, mechanical, plumbing)					
<b>TOTAL</b>					

The Town also needs to track inspection volumes and time-frame from inspection requests to actual inspection. Current reports do not allow for easy monitoring of inspection workloads or any time lags between inspection requests and inspections. The department does produce some information on workloads and scheduling, but it is aggregated on an annual basis:

**Current Report – Inspection Timelines**

Building Inspections	2010	2011	2012	2013	2014	2015	Average
% on Day Requested	99%	98%	90%	90%	75%	60%	85%

The following is a recommended approach to developing a performance report on the completion of building inspections.

**Recommended Report – Building Permits**

<b>BUILDING PERMIT INSPECTIONS</b>				
	<b>Total inspections requested</b>	<b>% Next Day</b>	<b>% Next 2 Days</b>	<b>% more than 2 days</b>
[MONTH/YEAR]				

***Recommendation 1: The Town should track review times and resubmittals for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make decisions regarding resource deployment and workload management.***

***Recommendation 2: The Department should develop more detailed monitoring reports on inspections volumes and inspections scheduling and use this to track and address delays.***

**2. THE TOWN SHOULD REDUCE TURNAROUND TIMES FOR REVIEWS AND MAKE STAFFING OR OTHER ADJUSTMENTS TO ENSURE THAT THESE ARE MET.**

The Town does have in place some performance targets for permit review and issuance, as well as inspections. These are relatively limited and are shown below.

- **Planning:** 60 calendar days for initial review; 45 calendar days for resubmissions (incorporates internal review by other departments/divisions).
- **Building:** 1 business day for trade or other simple permits which require no or minimal plan review; 5 business days for residential plan review and permit issuance; and up to 60 calendar days for commercial plan reviews and permit issuance. No specific targets are in place for conducting re-review of plan submittals but these are given priority.

**(1) Planning Performance Targets.**

In meetings, stakeholders and other customers stated that their primary concern with the planning process involved the time involved in obtaining a permit. Feedback from applicants indicated a high level of frustration with the turnaround times for

planning reviews, especially the 45 calendar days for review of a resubmission. Given that most projects require at least one re-submittal, these time-lines mean that a project could be under review by the Town for at least 105 calendar days. The stakeholder survey produced similar feedback.

### **Stakeholder Survey Results: Planning**

<b>Planning</b>	<b>Agree</b>	<b>Neutral / NA</b>	<b>Disagree</b>
The amount of time taken to review and approve an application is acceptable.	22%	33%	44%

Best management practices typically recommend that initial planning applications be reviewed within 30 business days of submittal, significantly less than the state requirement or than Blacksburg’s current performance. While this may be unrealistic given the workload and staffing in Blacksburg, reducing timelines should be a priority for the Town and the implementation of a 30 business day target in the future would be an important service improvement. To accomplish this however, would require the addition of another position within the department. In particular, the Town should focus on expediting review of resubmitted plans. The process of reviewing re-submitted plans should be significantly simpler than the initial review. Recommended process and technology changes to reduce the time involved in review are provided throughout this report.

### **(2) Building Permit Performance Targets.**

Building Permit target review timelines should be broken out by permit type, to distinguish between simple permits and ones that require distribution to other departments and detailed review. The table below provides recommended performance targets by permit type.

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<b>Permit Type</b>	<b>Days – Intake to First Review</b>	<b>Days on Resubmittal</b>	<b>Average Number of Re-submissions</b>
<b>New Commercial Construction – Major</b> (e.g., new dormitory complex or office building)	60	30	2
<b>New Commercial Construction</b>	30	15	1
<b>Commercial Addition</b>	30	15	1
<b>Commercial Remodel</b>	15	10	1
<b>New Residential Construction</b>	15	10	1
<b>Residential Addition</b>	5	1	1
<b>Residential Remodel</b>	5	1	1
<b>Trade (electrical, mechanical, plumbing)</b>	0	n/a	n/a

Applicants and inspectors stated that next day inspections are often not available, causing frustration and delay for projects. The standard accepted performance level for inspections is typically next day – inspections requested by 5 pm (or another time designated by the Town) should be scheduled for the following day. If this standard cannot be met, the Town should clearly articulate the performance standard (i.e. – 48 hours) that it will commit to performing.

To ensure that timeframes are met, the Town needs to take a proactive approach and develop a contingency plan that outlines the steps that will be taken to meet performance standards when changes in workload exceed the capacity of the existing staff to meet them. This contingency plan should outline the conditions under which different options will be utilized. The options should include the use of the following:



- **Overtime** – for staff to work additional hours when needed to maintain adopted service levels.
- **Cross-training** – to provide an internal “backup” to the existing staff that conduct plan review functions.
- **External Resources** – such as contract plan reviewers or inspectors contracted with the Town or the utilization of external part-time plan reviewers.
- **Contracted Professional Resources** – such as the utilization of the ICC Plan Review service, or other similar service providers.

The actual resource utilized is less important than the development of an effective strategy to address workload increases and/or backlogs when staff are unable to meet plan review or inspection targets.

The contingency plan should provide examples of when each type of resource will and will not be utilized and ensure – in the case of external resources – that appropriate preparation has occurred to have these resources available when needed (i.e. – evaluating, selecting, and pre-approving contract resources for use by the Town). The establishment of performance standards alone will not improve the performance of the Department’s operations. These standards must be ones that can consistently be met – meaning that performance to the goals should be targeted at 95% or above.

The Blacksburg Building department has a particular challenge in that there are specific factors that cause heavy spikes in activity on a periodic basis. In late summer, builders are seeking to get new housing and renovations completed and signed off on before the Fall semester begins at Virginia Tech. In addition, major building projects – such as student housing complexes - associated with the University but on Town property may overwhelm a building department. Fortunately, these additional demands are relatively predictable for the Town. It is recommended that the town establish a

policy to hire outside reviewers and inspectors to oversee major building projects and also to provide additional support during the late summer peak season.

Once standards are being consistency met (at least 95 percent of the time) they should be widely publicized and placed on the Department's web site.

***Recommendation 3: The Department should adopt a 45 calendar day review time for initial applications and 20 calendar day review time for resubmissions for Planning applications.***

***Recommendation 4: The Department should adopt a target review times for building permits ranging from 1 business to 30 calendar days for most projects – depending on project type and complexity, with 60 business days for major commercial projects.***

***Recommendation 5: The Department should adopt a standard of providing building inspections available within one day of request.***

***Recommendation 6: The Town should develop a contingency plan that includes the use of external resources or overtime, when they are unable to complete plan review and inspection workloads within required timeframes.***

***Recommendation 7: The Town should secure professional plan review and inspections help for major construction projects and during the summer peak building season to prevent departmental staff from becoming overwhelmed and to ensure that timelines are maintained across the board. The cost of this plan review should be borne by the applicant through fees.***

***Recommendation 8: Performance targets and actual performance should be placed on the Town's web site.***

**3. MANAGEMENT FOCUS FOR EMPLOYEES SHOULD INCLUDE AN EMPHASIS ON CUSTOMER SERVICE AND PROBLEM SOLVING, AS WELL AS TECHNICAL ABILITY.**

Staff involved in permitting and inspections demonstrated pride in their work, especially in the quality and thoroughness of the technical review. The Town of Blacksburg places a heavy emphasis on ensuring that development is safe, environmentally sensitive, and in keeping with the Town's character and long term planning.

Interviews, surveys and feedback from stakeholders indicate that there is less emphasis on customer service, problem solving, or providing applicants with a clear path forward for their projects when issues are identified. The stakeholder survey had a relatively low response rate, but the feedback on “problem solving” was mixed, as illustrated below.

Staff deal with me using a positive approach of "here's how to get your application approved", rather than a punitive approach of "you can't do it that way".	Agree	Neutral	Disagree
Planning	44%	22%	22%
Engineering	33%	33%	22%
Building	70%	20%	10%
Inspectors	22%	11%	56%

Many participants in stakeholder focus groups expressed frustration regarding rigid staff interpretations and a lack of problem solving in planning, engineering review, and building inspections. These comments were a consistent theme in two days of stakeholder meetings. Statements from participants included:

Focus Group Comments
Overall attitude of “No” – instead of “here’s an approach”
Grey areas – staff interpret things the way they please.
Staff should understand and consider the cost to the applicant of what they are requiring. Staff have stated that they don’t care how much a change will cost – changes that add no benefit but cost thousands are not their concern.
Need a change in culture – top down – that promotes problem solving attitude, partnership attitude with the development community. (Not asking them to relax standards, just be a partner.)
Staff are inflexible even when a specific requirement makes no sense for the site

There are several steps that managers can take to promote a culture of problem solving and facilitation. One key item is to communicate that there need not be a trade-off between acting a facilitator and maintaining rigorous standards. Staff also should be empowered and encouraged to show flexibility when they can, as long as the full intent

of the regulations is met. In some cases, training and experience, as well as modeling this behavior by managers, can help staff become more comfortable with making judgment calls.

A review of staff job descriptions showed that they focus heavily on technical skills and abilities. Job descriptions should also focus on customer service skills, including the ability to work constructively with people, and facilitation. Where possible, staff evaluations and any decisions regarding compensation should also take into account these skills.

***Recommendation 9: Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and flexibility where feasible.***

**4. MANAGERS SHOULD WORK WITH STAFF TO ENHANCE CROSS TRAINING AND DEVELOPMENT OF SOPS TO IMPROVE EFFICIENCY AND CONSISTENCY AND DEVELOP CONTINGENCIES IN CASE STAFF MEMBERS ARE UNAVAILABLE.**

Employees interviewed for this report indicated that have developed their understanding of the Town's policies and procedures over time through on the job training. Because of the relatively small size of the department, there is little cross training.

Creation of a "desk manual" for each position would help codify the work and processes associated with each position. The goal of the manual is to have a document in place so that any other employee, or a new hire, could take over that position and clearly understand the position's specific duties and how to carry them out.

Major elements of the manual for each position include:

- **Primary Contacts** -- The names, phone, and email of anyone who is critical to the task or who is contacted frequently.

- **Directory of Locations** – The locations of any materials or equipment needed to do their jobs.
- **Task Grid** -- A task grid lists the major activities of the position and how frequently each task is performed.
- **Key Processes** -- Major tasks should be broken down into smaller steps.

Most comprehensive and useful manuals are prepared by the staff currently in the relevant positions. They may start by logging all activities done in the course of a week.

While the immediate purpose of the desk or operations manual is to memorialize what is required for each job in case of vacancy or other need, the document serves other purposes as well. It allows the employees and their managers to review each position's tasks and work flows and assess them, and it creates an organization-wide document that institutionalizes the current management and operations.

***Recommendation 10: All staff members should be directed to create a desk manual for each position, outlining day to day, weekly, and monthly duties for that position, including key information needed to carry out their duties. This manual should be reviewed and revised on an annual basis.***

### **3. ANALYSIS OF TECHNOLOGY UTILIZATION**

The Town currently uses Trak—It permitting software, which was procured approximately 8 years ago. While the software provides a basic forum for tracking stages of permit acceptance and review and inspection of projects, expanded use of this and other technology could significantly improve efficiency and customer service.

#### **1. SOFTWARE COULD BE USED MORE EXTENSIVELY AND CONSISTENTLY BY STAFF TO MANAGE EACH PHASE OF THE PERMITTING PROCESS**

The software is currently used to track key milestones within the permitting process. However, it is not used uniformly by all reviewers. In particular, Engineering staff track plans separately using an Excel spreadsheet. The Town also uses spreadsheets and hand calculations to prepare their performance reports.

All departments rely heavily on paper files, printed plans, spreadsheets, and E-mail that could be reduced and potentially eliminated with better and more consistent use of software. In many case, documents are developed on a computer, printed, distributed as paper files, scanned, and then re-attached into another computer system – documents that could be simply saved and attached electronically.

Ideally, permitting software can and should be used by staff for the following:

Function	Description
Intake	Record intake date in the software. Attach electronic copy of the application and all attachments (site plans and drawings). Plans should be provided to the Town in electronic format for attachment to the permit record.
Acceptance	Plan reviewer reviews the application and deems it complete. Notes “acceptance” in software.
Distribution	Plan is distributed electronically to all reviewers with a target date for re-review. Date noted in software.

Function	Description
Review	Reviewers enter review comments into the software. All reviewers should provide comments or indicate “no comment” or “no issues” in comments.
Comment letter	Project manager in planning consolidates comments into a single document, which is noted in the software as the complete initial plan review. Comment letter is sent to applicant electronically, preferably through the software system.
Resubmission	Record intake of resubmission. Plans are resubmitted electronically and attached to the record.
Redistribution	Plan is re-distributed electronically to those reviewers who had comments.
Issuance	If all comments have been addressed, permit is issued and accepted. All conditions of approval are noted in the software.
Project management	Software is used to track key “to do” items such as bonds, primary and secondary permits, erosion control plans, etc.)
Inspections	Required inspections are listed in the software. Inspection results are entered into the software.
Record drawings	The applicant provides record drawings electronically to the Town, which uploads the drawings into GIS and attaches to the final permit record.
CO issuance	All departments / divisions that must sign off prior to CO sign off in the software. CO can’t be issued until sign off has been made.

One major reason that many staff may not be using the software effectively is that they lack training on the full capabilities of the system. According to the software vendor, employees have not received official training since at least 2011, and most of the employees currently working in the town have learned on the job with no formal training. The software vendor offers a wide range of training programs, including on-line training. Estimated costs to provide a three-day training program by the vendor are approximately \$4,000 plus actual travel expenses. Annual periodic refresher training could be acquired for approximately \$2,000 annually.

Town employees have also expressed concern regarding the validity of

signatures and engineering stamps on electronic documents submitted to the Town. The Town of Blacksburg benefits from the fact that many other jurisdictions and many software providers have identified and addressed these issues.

The State of Virginia Uniform Electronic Transactions Act speaks to a number of the legal issues related to electronic signatures affirms the validity of electronic signatures.

**§ 59.1-485. Legal recognition of electronic records, electronic signatures, and electronic contracts.**

- (a) A record or signature may not be denied legal effect or enforceability solely because it is in electronic form.
- (b) A contract may not be denied legal effect or enforceability solely because an electronic record was used in its formation.
- (c) If a law requires a record to be in writing, an electronic record satisfies the law.
- (d) If a law requires a signature, or provides for certain consequences in the absence of a signature, an electronic signature satisfies the law.

In addition, the state laws governing licensing of architects and engineers allows the use of an electronic seal.

**18VAC10-20-760. Use of seal.**

C. An electronic seal, signature, and date are permitted to be used in lieu of an original seal, signature, and date when the following criteria, and all other requirements of this section, are met: 1. It is a unique identification of the professional; 2. It is verifiable; and 3. It is under the professional's direct control.

Most permitting software systems and many other software providers have systems in place for creating and maintaining the integrity of unique signatures and seals. The Department should reach out to Blacksburg's IT department for more guidance, and may also want to consult with other local governments who have successfully implemented electronic signatures and seals.

***Recommendation 11: The Town should begin to transition paper processes to electronic by taking greater advantage of the capabilities of the Town's software system.***



***Recommendation 12: Staff should participate in training to learn how to use the software to its full capabilities including developing the detailed performance reports.***

***Recommendation 13: The Town should ensure that all employees receive permit software training, as well as annual refresher training.***

***Recommendation 14: The Town IT department should help the Departments develop and implement a legally acceptable standard for electronic signatures and seals for permit applications, plans, and related documents.***

**2. A CUSTOMER AND CITIZEN PORTAL INTO THE TOWN'S PERMITTING SYSTEM WOULD IMPROVE CUSTOMER SERVICE AND REDUCE WORKLOAD FOR EMPLOYEES.**

Many communities now provide an on-line portal so that applicants can apply, pay for, and receive permits electronically. Applicants can also go on-line to look up review status, read comments on their plan reviews, and see inspection results. In their simplest versions, the portal allows for electronic applications for very simple building permits and other permits typically considered "over the counter." More robust systems allow for submission for any time of permit, attachment of CAD or PDF drawings, re-submittal of revised drawings, and payment of additional fees such as bonds.

Many stakeholders who participated in focus groups expressed a strong desire for an on-line portal and electronic submittal of documents. The estimated costs to implement this functionality is approximately \$20,000 for initial implementation and \$4,000 annually for support and maintenance.

***Recommendation 15: The Town should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.***

**3. INTERDEPARTMENTAL COORDINATION AND COMMUNICATION COULD**

**BE IMPROVED THROUGH THE USE OF ELECTRONIC MARK UP SOFTWARE FOR PLANS.**

Many communities are now moving towards a system where plans are marked up and comments developed using electronic plan review. This approach carries several advantages:

- The need to print, distribute, and file multiple sets of paper plans is eliminated.
- Comments and mark ups from different reviewers can be compared and reviewed side-by side by both the project manager and the applicant.
- The programs provide assurance that all reviewers are looking at the same set of plans.

Staff using electronic mark-up should be provided with dual monitors including one extra-large monitor for plans. The costs of implementation of this functionality is approximately \$250 per license for the software and \$500 per monitor.

***Recommendation 16: The Town should implement a pilot program for electronic plan mark-up and eventually deploy electronic plan mark-up for all reviewers.***

**4. FIELD INSPECTOR EFFICIENCY CAN BE ENHANCED THROUGH THE IMPLEMENTATION OF MOBILE DEVICES IN THE FIELD.**

The Town of Blacksburg is in the process of providing at least some inspectors with laptops and field access to the Town's permitting software. However, the process has been somewhat cumbersome, and made more difficult because of inconsistent cellular service in the Town.

If fully implemented, the Town can further enhance the efficiency and effectiveness of field inspections through the use of mobile devices for all inspections (building and engineering). The ability to more efficiently enter inspection results, especially if the system is connected through cellular service, will enable the permitting system to be automatically updated and show the result of the inspection as soon as it

is entered in the field by the inspector. Their use will also reduce the amount of time required to be in the office for data entry and will increase the number of inspections that each inspector can complete daily. It is estimated that full deployment of the laptop program will have a one-time cost of \$17,000 for initial implementation and an on-going annual cost of \$4,500.

***Recommendation 17: The Town of Blacksburg should implement tablet or laptop use for all field inspections.***

## **4. ANALYSIS OF APPLICANT REQUIREMENTS AND RESOURCES**

The sections and recommendations below focus on promoting greater information flow between staff and applicants to support and clarify the permitting process as well as demonstrate the Town's full desire to implement a "culture of service."

Clear, comprehensive, and accessible public information improves the quality and completeness of permit applications and reduces the amount of time spent by staff explaining the Town's requirements and processes.

Providing opportunities for applicants and stakeholders to give feedback to the town promotes good will and ensures that Town staff are aware of issues of concern.

### **1. THE LEVEL OF DIALOGUE BETWEEN THE TOWN AND THE DEVELOPMENT AND BUSINESS COMMUNITY SHOULD BE INCREASED.**

Staff involved in the development review process need to focus on providing a much higher level of communication, dialogue and interaction with the development community in a proactive manner – not simply working with them when problems arise or interacting on a reactive basis. This should be started by implementing quarterly meetings hosted by the Town (including representatives from Planning, Engineering, and Building) for those practicing in the development industry to inform them of changing policies, new code requirements, and providing education on the application of the codes as well as to obtain feedback regarding how the permitting process is working in practice.

Most communities that implement this approach utilize a one to one-and-a-half-hour meeting that is focused on a specific topic. The format should vary by topic but

typically would include a presentation by staff on the topic at hand, a period of questions and answers, and a time for informal interaction between the parties. The Town has implemented a periodic breakfast meeting conducted by the Building Official with developers and contactors where various issues can be discussed. This is a great first step in developing a more interactive and collaborative relationship with customers.

Finally, the Town should also implement an annual survey of the development community to evaluate their level of performance. This can be accomplished through the use of a short on-line survey. The Town should also develop a brief on-line survey that is e-mailed to applicants at the time of CO issuance. This comment card should ask that the applicant rate the Town on several key factors:

- Level of Customer Service Provided (rating each department/division interacted with);
- Accessibility of staff;
- Thoroughness of staff;
- Satisfaction with the process;
- Specific areas / individuals that provided exceptional service;
- Specific areas / individuals where service problems were encountered; and
- An opportunity for the applicant to make general comments about the process.

An annual report should be developed outlining the level of satisfaction provided to applicants. Information gathered from this survey should be utilized for on-going evaluation of staff and improvement of the process.

It is important to note that these educational and outreach efforts will require time on the part of staff to implement. This will obviously slightly reduce their time available for performing other primary duties (such as plan reviews and inspections).

***Recommendation 18: An increase in the dialogue between the Town and the Development and Business Community should be adopted including quarterly training and meetings, newsletters, and frequent outreach for input.***

***Recommendation 19: The Town should conduct an annual and ongoing customer satisfaction survey.***

**2. THE TOWN DOES NOT OFFER ANY PUBLICATION OR INFORMATION ON-LINE THAT PROVIDES A CLEAR, BROAD OVERVIEW OF WHAT IS INVOLVED IN THE PERMITTING PROCESS**

At the present time, the Town does not have a comprehensive “how to develop” guide available for use by the public in a manner that makes the Town’s requirements for all phases the development review process that is written to be easily understandable for all customers.

The web page for the Town offers basic information regarding the process, but it does not yet provide enough detail for applicants to use it as a guide or answer all questions.

A comprehensive development guide document and web page should be created that covers the entire development review process from project concept through the final certificate of occupancy.

This guide needs to be more than a simple recitation of the ordinances and codes, but clearly explain the steps of the process, how to comply and appropriately submit an application, and identify the review that will be conducted by staff. Within this document, it would be appropriate to include copies of checklists for each phase of the process that clearly identify to the applicant the information that must be submitted and why it is required. Also included within the document should be a section that clearly outlines the review time standards that have been adopted by the Town.

Below links to some examples of guides developed by other communities:

**On-line Guides:**

Raleigh, NC:

<http://www.raleighnc.gov/business/content/PlanDev/Articles/DevServ/DSGuide.html>

San Diego, CA

<https://www.sandiego.gov/development-services/devprocess>

**Printed Guides:**

Portland, OR

<https://www.portlandoregon.gov/bds/index.cfm?a=93126>

Concord, MA

[http://www.concordnet.org/pages/ConcordMA\\_Planning/ConcordFinalMay312016.pdf](http://www.concordnet.org/pages/ConcordMA_Planning/ConcordFinalMay312016.pdf)

Cedar Park, Texas

<http://www.cedarparktexas.gov/Modules/ShowDocument.aspx?documentid=189>

These examples provide alternative approaches that the Town can consider for developing its own guide. While many of these communities are not comparable in size to Blacksburg, the guides present differing perspectives on options that the Town can consider for format and layout.

***Recommendation 20: The Town should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public's understanding of the process.***

**3. AS AN INTERIM STEP PRIOR TO IMPLEMENTING ON-LINE PERMITTING, MAKING ALL FORMS FILLABLE WOULD ASSIST APPLICANTS.**

The permitting process in Blacksburg entails the use of various application types for the various entitlements and permits issued by the department. Physical copies of these applications are available at the town's intake counter, and the department's web page also provides downloadable PDF scans of these forms. For most application types, applicants must print and fill out these forms by hand before bringing them in.

The project team recommends that the department upgrade all of the existing application forms from a scanned PDF format to an electronically fillable PDF format so that applicants can fill in the required fields electronically after downloading the form without having to write their information in by hand. In addition to making the process easier for the applicant, this will help to ensure that all necessary information is captured on the form. This will also serve as a step toward the eventual goal of fully electronic application submittal, since eliminating printed forms altogether would require the fillable PDF format as well.

***Recommendation 21: Application forms should be updated to fillable PDF format and made available online for customers to complete and print out.***

**4. CODE INTERPRETATIONS SHOULD BE PUBLISHED ON THE TOWN'S WEBSITE.**

The Planning and Building and Engineering Departments should develop an interpretation log that records how various development codes and building codes are interpreted in cases where the application of certain regulations is not entirely clear. This will ensure consistency in interpretation in the future and provide clear transparency regarding the Town's decision-making.

The interpretations should be developed in a consistent format that provides, at a minimum, the following information:

- Effective date of interpretation.
- Section of the Code / Regulation referenced.
- Description of the interpretation.
- Legal basis for the interpretation (if applicable).
- Applicability of the interpretation – outline of the circumstances under which the interpretation is applicable and not applicable.

In addition, the Town could provide sample documents that include details and drawings outlining examples of conforming plans and prior project implementations to



provide guidance to applicants on methods of achieving compliance with regulations. These examples should cover common project types or focus on areas identified by the Town where applicants have historically had difficulty in complying. An example of this would be the enhancement of information available in the water and sewer manual outlining for common installations additional information and specifications regarding required (or preferred materials), connection types, valve box size, etc.

This type of sharing of information will increase the ability of applicants to prepare submissions that are in line with the policies and procedures being enforced by staff and may eliminate the need for revisions to be made in applications. Only those interpretations that have been fully reviewed and that are intended to be utilized for all future applications should be included in this manual.

***Recommendation 22: Staff should document interpretations of local codes, building code, and internal policies and procedures and make these available to the public on the Town's website.***

***Recommendation 23: Where feasible, the Town should develop example specifications and details for common installations that have historically been problematic for applicants to clearly outline required and preferred materials, installation approaches, etc.***

**5. INFORMATION ON THE WEB SITE SHOULD BE COMPREHENSIVE, EASY TO FIND, AND UPDATED FREQUENTLY.**

Currently, the Town of Blacksburg provides high level information on its website in regard to adopted plans, regulations, and submittal requirements. Much of the information related to development review and permitting is scattered throughout the Planning, Building, and Engineering webpages with a varying degree of detail.

During this project, the Town has updated its website and created a "Development Application Process" webpage that has collocated many of the

development project applications by type. This new page includes checklist for respective applications.

While this centralized depository of development applications is a strong to start to providing information to citizens and customers it should continue to grow with the number of applications and subsequent information and checklist. The “Development Application Process” webpage should be periodically updated with new checklist and applications. Checklist and applications on the “Development Application Process” webpage should include the following:

- Fillable PDF forms.
- Cite Town adopted ordinances and/or design standards.
- Include last updated date
- Timeline of application submittal, review, and approval process.
- Contact information of appropriate Town staff to allow for clarification of application requirements.
- Information on approval process (administratively versus public hearing)

Over the past several years the Town has completed several small area projects, bicycle plans, and other relevant studies that are not published on the Town’s Planning and Building webpage. In order for the citizens and customers to review the results of these studies, they must search multiple locations on the Town’s website and also know that the study was conducted. The creation of a “document center” would allow for a centralized location of current and past studies and the recommendation that was presented or adopted. A link to this page should be located on all Planning, Building, Engineering, and GIS webpages to allow quick access.

***Recommendation 24: The Town should continue to update and centralize all permitting information on the web site. One staff member should be tasked with periodically reviewing material and ensuring that it is current.***

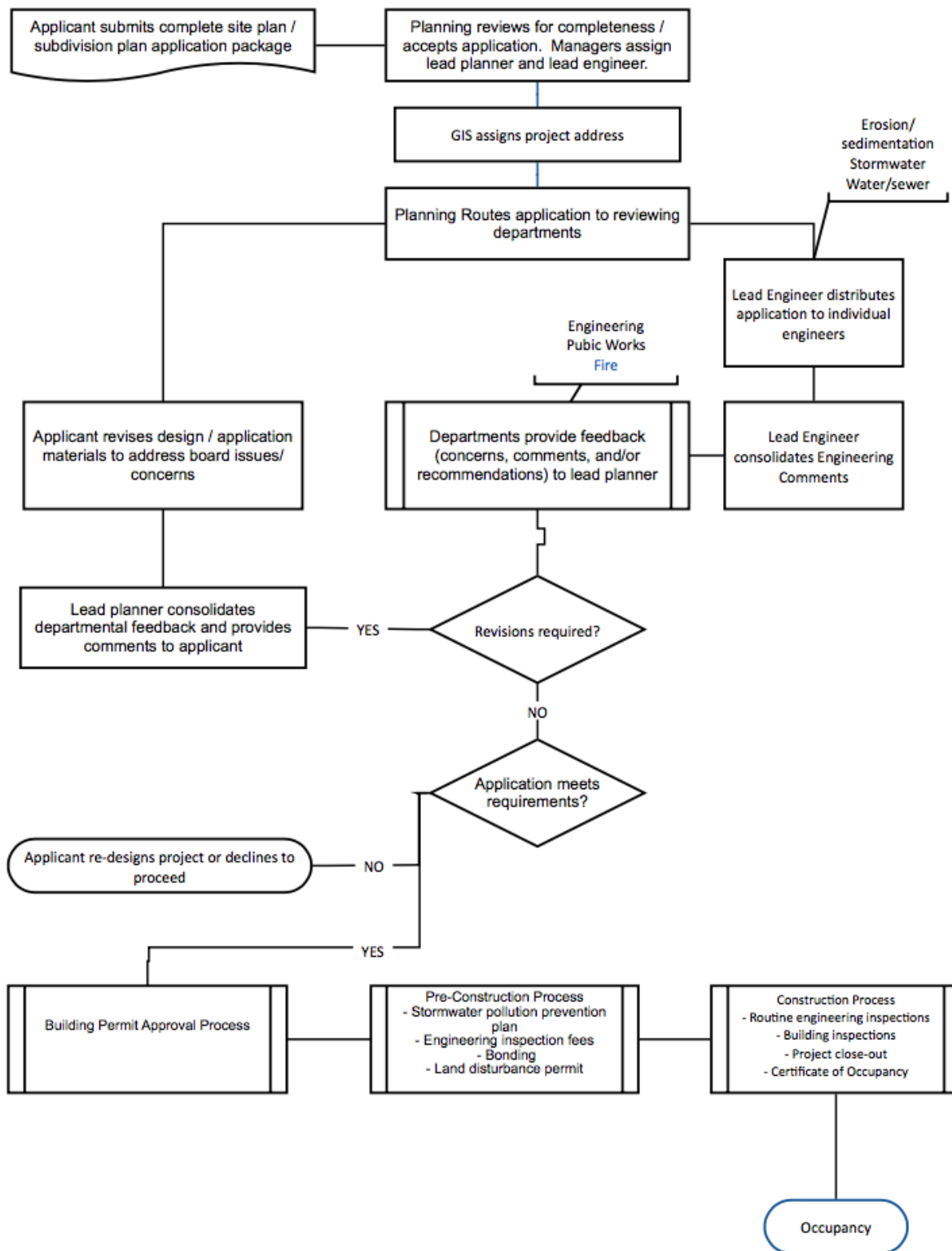
## **5. ANALYSIS OF THE DEVELOPMENT PROCESS**

This section provides a review and recommendations regarding the actual process flows used to take in, review, and issue permits.

### **1. THE PLANNING REVIEW PROCESS IS LARGELY CONSISTENT WITH BEST PRACTICES BUT SOME ADJUSTMENTS COULD IMPROVE CONSISTENCY AND PREDICTABILITY**

The planning process is largely consistent with best practices seen in development review. The Town uses a project manager to shepherd the application through the review process, and provides consolidated comments to the applicant so that the applicant is not required to navigate the Town's different departments and divisions to identify and address issues with the application.

In practice, however, a number of modifications to process and practice could streamline the process and provide greater consistency and clarity to the applicant.



One of the keys to ensuring a predictable and efficient process is to provide applicants with enough information to develop a complete and code-compliant application at the time of intake.

While the Town does offer pre-application meetings, the use of these meetings should be expanded, and required for select type of applications as identified by the Town, to provide the applicant with clear feedback to ensure that they design the project that meets the Town's requirements. The Town should highly publicize which project types will require a pre-application meeting. The meetings should include staff from Planning and Engineering, at a minimum, as well as any other departments or divisions that may have an interest in the project. At the conclusion of the meetings, the applicant should be provided with a written summary of the points discussed and agreed upon.

At the time of intake, the assigned Project Manager or a trained intake position on the front counter, should conduct a detailed completeness review of the application and identify any items that are missing. The results of this review should be conveyed to the applicant. If the application is missing critical information necessary to undertake a complete review, it should not be accepted. If the items missing are minor, the applicants should be given a brief window during which the needed can be provided.

All projects are reviewed by members of the Town's Development Review Committee (DRC), which meets weekly. The agenda (DRC) meetings is typically distributed on Friday afternoon, with the DRC meeting occurring on Monday morning. This approach allows almost no time for review. Many of the departments included in the DRC meeting may not know of a particular project until the DRC meeting agenda is

distributed and thus not have adequate time for project review. In order to provide a more proactive approach for project review for DRC inclusive departments the following changes are recommended:

- DRC meeting agendas should be distributed at least one week before the meeting.
- As an interim measure until the Town's permitting software system is expanded, electronic plans should be placed in a shared folder. A link to these plans should be provided in the DRC memo.
  - A distribution memo should be created to include project type, location, review timeline (including public hearing dates, etc.), and project manager designee.
- Email distribution list should be created for application submittals and DRC meeting agenda distribution.
- All DRC members should indicate within the initial review window "no interest" or provide comments to the Project Manager in Planning.

These proposed changes will allow adequate time for all departments to review applications, allow for discussions with other departments, and attend to DRC meeting prepared, and thus streamline discussions. The requirement that DRC members comment or decline to comment on each application reduces the chances for "late hits," issues that come up late in the review process.

***Recommendation 25: The Town should use a pre-application process to provide high-level, early feedback to the applicant regarding their project. This meeting may be required for certain project types. A written summary of the key points discussed and agreed upon should be provided to the applicant at the conclusion of the meeting.***

***Recommendation 26: The assigned Project Manager should conduct a completeness review of the application and only accept applications that are ready for review.***

***Recommendation 27: DRC distribution list should be created for email distribution of new applications.***

***Recommendation 28: DRC meeting agendas should be distributed a minimum of three days prior to DRC meeting.***

***Recommendation 29: Create shared electronic file folder for all new applications and allow access to all DRC members.***

***Recommendation 30: All DRC members should be required to comment on applications or state that they have no comment.***

## **2. THE TOWN SHOULD ENSURE GREATER CONSISTENCY AND CLARITY IN COMMENT LETTERS TO APPLICANTS**

Comment letters to applicants, provided at the end of the first review period, should provide a comprehensive list of additions and corrections required for a project to be approvable.

Many focus group members stated that comment letters can be inconsistent internally (include comments from different reviewers that are not compatible) and that they vary in content and format depending on the reviewers and Project Manager assigned.

A review of sample comment letters by the project team confirmed that the information contained in these comment letters varies by reviewer.

Letters varied in the depth and detail of the information provided, citation of applicable codes, variation on interpretation of adopted codes, and proposed recommendations. For example, some comment letters would site Town codes on a regular basis and other letters would not. The level of detail for code citing was varied with some reports merely citing the code section, with others inserting the text from the code. Several comment letters had proposed recommendations; items that were not required, but may be beneficial to the applicant, while other letters only provided comments based on adopted codes or design standards.

The Town of Blacksburg should develop and implement standard comment letter guidelines that address the level of information provided in comment letters. These guidelines should address the following items:

- Level of detail in citing Town codes (i.e. cite only the statute or design guideline, or cut and paste the applicable section)
- Identify individual in Planning and Engineering that is responsible for reviewing technical content and depth of content for consistency.
- Limit comments to those areas identified on checklist and/or reference comments to specific items on checklist.
- Provide contact information for the individual reviewer so applicant knows appropriate staff member to contact with questions.
- Determine the number of resubmittal plan sets required.

Based on the implementation of guidelines, individual reviewers will be able to tailor their comments that will be more consistent between individual reviewers. The Planning and Engineering staff member dedicated to provide oversight of comments received, will also provide consistency in the content in these comment letters. More consistent information provided in comment letter will provided better customer service to applicants.

***Recommendation 31: Create and implement comment letter guidelines and identify Planning and Engineering staff member to review comments before transmittal to the applicant.***

**3. THE ENGINEERING REVIEW PROCESS ENSURES EXTREMELY DETAILED REVIEW BY EACH SPECIALTY AREA BUT SACRIFICES CONSISTENCY.**

The Engineering review is a sub-process of the Planning review, with each project being assigned a Lead within the Engineering department and the project plans being distributed to several reviewers to scrutinize and provide comments. This approach ensues that areas specialty areas within Engineering (e.g., stormwater,



erosion control, utilities) are adequately reviewed. This approach typically provides a more detailed review within each specialty. Some concerns were identified regarding the differing levels of detail between the engineering reviews (and other reviews conducted). The Town should work to provide a similar level of detail on all reviews.

This can be accomplished through training of staff on the required / desired level of detail in plan review comments. Additionally, it could be accomplished by ensuring that a single individual reviews all comments before issuance.

***Recommendation 32: The Engineering Department should ensure that it provides review comments at a consistent level of detail across disciplines.***

**4. THE NEED FOR DETAILED ENGINEERING ANALYSIS PRIOR TO ANY REVIEW OF PROJECTS SIGNIFICANTLY AFFECTS THE COST OF PREPARING APPLICATIONS. THE TOWN MAY WANT TO EXPLORE OPTIONS FOR DEFERRING THESE REQUIREMENTS.**

Another issue identified by stakeholders was the need for extensive, detailed, and expensive engineering analysis (e.g., detailed stormwater calculations) to be done even for applications going through the public hearing process, especially for projects with a binding concept plan that may require significant changes that may result from the public hearing process. The changes then require all of the engineering work to be re-done.

Some communities address this issue by creating a separate land disturbance permit process, which takes place after the planning approval has been received. This approach brings advantages it also carries risk for the Town and the applicant, if a project is approved based on Planning requirements but is unable to meet the Town's stormwater or other standards. However, the town should consider entering into a dialogue with engineering firms to determine whether such an approach could be

considered, and under what process.

***Recommendation 33: Work with local stakeholders to assess the feasibility of implementing a separate land disturbance permit for selected larger projects and establish specific criteria regarding which projects would qualify for this process.***

**5. THE BUILDING PERMIT REVIEW PROCESS IS RELATIVELY EFFICIENT BUT THE TOWN NEEDS TO ADDRESS LARGE FLUCTUATIONS IN WORKLOAD.**

The Building permit review process typically involves one building reviewer, with projects first routed to zoning and GIS if required.

Building's primary challenge involves dealing with the uneven waves of workload caused by major projects and seasonal variations. These issues are discussed earlier in this report. The Town's staffing level should be adequate to meet the base level of work-load as well as to oversee temporary employees or contractors who should provide the additional labor needed to address additional workload that occurs during peak periods. It is recommended that the town develop a threshold project size over which the applicant must use an outside reviewer. This will prevent permanent staff from becoming bogged down in major projects, resulting in lower service levels to other customers.

Many additional efficiencies in Building can be achieved with the implementation of on-line permitting, especially the electronic issuance of simple permits, such as trade permits and minor residential improvements.

A significant cost issue for applicants involves the scheduling of re-inspections for projects that fail inspection. Because inspections often need to be scheduled several days out, a failed inspection leads to expensive delays in a project. Some focus group participants stated that they would fail an inspection for a minor, non-safety item

and that this failure would place a project on hold for several days. The consultants were unable to verify this, but do recommend that the Town ensure that re-inspections, especially for minor items, be expedited. Several neighboring communities will accept photographs showing that corrections have been made, on a case by case basis.

Given location and availability of outside vendors to provide plan review and inspection services, the development of this plan may be more difficult than in some other communities. Notwithstanding this, the Town should explore the feasibility of developing these services through an RFP process to identify potential vendors who could provide this service to the Town. If this effort is not successful, the Town would need to develop other alternatives including additional staff resources to ensure a consistent level of service is provided to applicants year-round.

**Recommendation 34: The Building Department should develop and implement a program to outsource major projects and handle peak inspections that typically occur in the late summer.**

**Recommendation 35: Ensure that re-inspection for minor, non-safety failed items occur within one day to avoid causing construction delays.**

## A. PROFILE OF DEVELOPMENT REVIEW

### 1. INTRODUCTION

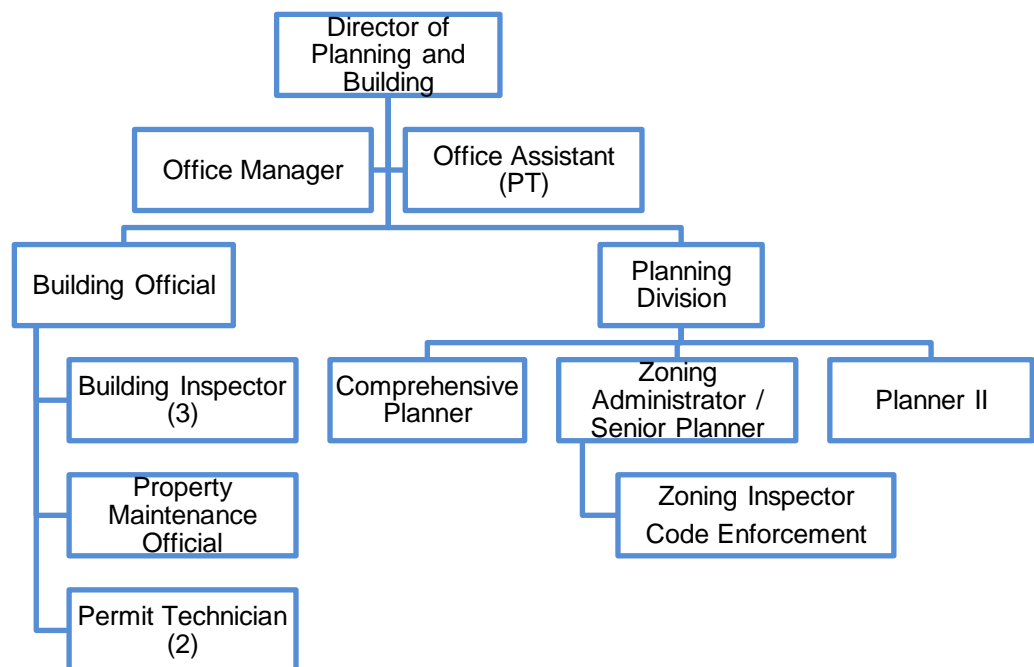
The purpose of this profile is to document the existing organization, processes, workload, and technologies being used by the Town of Blacksburg's permitting and land use operations. The completed profile represents the "as is" status of service delivery. Development of this profile is the first step in this study focused on evaluating and identifying improvement opportunities in the administrative development review process.

### 2. ORGANIZATION, ROLES, AND RESPONSIBILITIES

The following sections provide a summary of the current organizational structure, staffing allocations, and summary of the roles and responsibilities for each position involved in the development review process.

#### (1) Planning and Building Department.

The current organizational structure of the department is shown below:



The following table summarizes key roles and responsibilities of each position within the Department. Some additional job duties are included, but not directly related to Development review have been included to provide a more accurate reflection of overall staff workload.

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
<b>Administration</b>			
Director of Planning and Building	1.0	1.0	<ul style="list-style-type: none"> <li>Oversees long term planning, current planning, and permitting activities.</li> <li>Acts as liaison with a range of town organizations.</li> <li>Works with developers, engineers, and builders to communicate expectations and coordinate requirements from project conception through occupancy.</li> <li>Supervises building official and planning staff.</li> <li>Reviews major planning documents, such as staff reports.</li> <li>Maintains communication with Town Manager, Deputy Town Manager, Planning Commission, and elected officials.</li> <li>Ensures department coordinate in review, approval issuance, and project completion tasks.</li> <li>Involved in land use policy development and development review process.</li> </ul>
Office Manager	1.0	1.0	<ul style="list-style-type: none"> <li>Does intake of all planning applications and resubmittals</li> <li>Checks applications for completeness and routes to GIS, Planning, and Engineering.</li> <li>Initiates planning applications in CRW software.</li> <li>Prepares public notices, agendas, and abutters' notices.</li> <li>Plans ad hoc meetings.</li> <li>Answers phones and refers public to appropriate staff to answer questions.</li> <li>Answers routine zoning related questions.</li> <li>Oversees payroll.</li> <li>Reviews business licenses.</li> </ul>
Office Assistant	PT	PT	<ul style="list-style-type: none"> <li>Provides back up for office manager.</li> <li>Currently working on a special project to digitize historical information and place in laser fiche.</li> </ul>

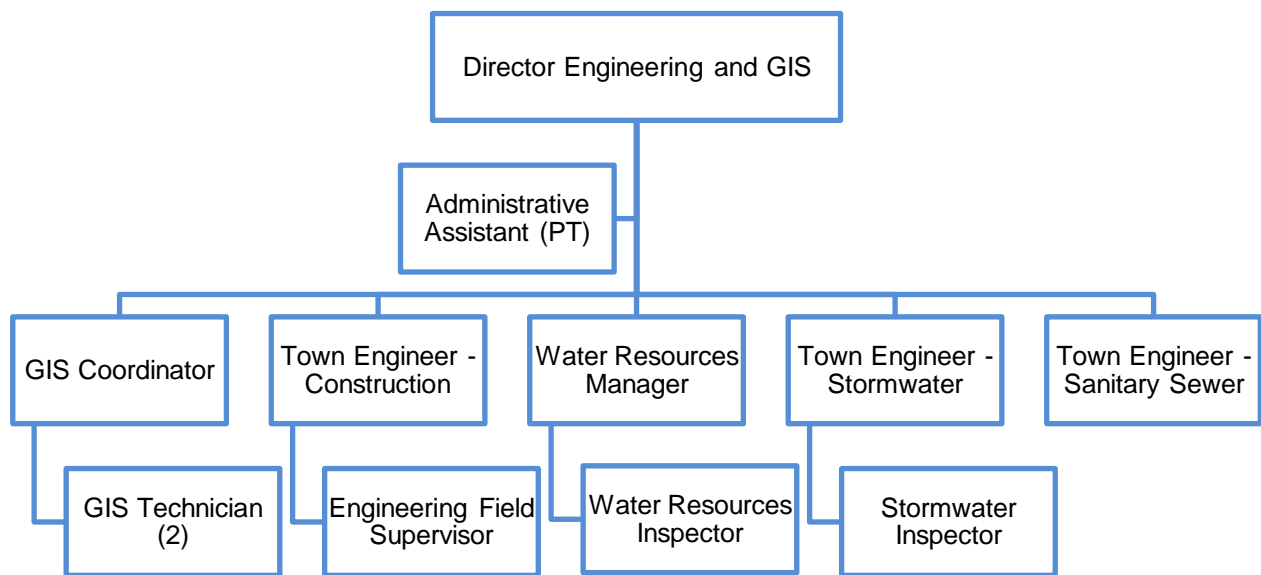
**Town of Blacksburg, Virginia**  
**Evaluation of the Development Process**

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
<b>Building Division</b>			
Building Official	1.0	1.0	<ul style="list-style-type: none"> <li>Responsible for all plan review. Reviews projects for compliance with Virginia State Building Code.</li> <li>Oversees inspectors and inspection activities.</li> <li>Makes building code interpretations and determinations</li> <li>Signs all permits.</li> <li>Reviews projects and issues COs upon receipt of final approval.</li> <li>Primary liaison for CRW software.</li> </ul>
Permit Technician	2.0	2.0	<ul style="list-style-type: none"> <li>Takes in building permit applications and routes them to appropriate departments.</li> <li>Reviews single family construction applications for zoning compliance.</li> <li>Contacts applicants when permit is approved.</li> <li>Takes in payment.</li> <li>Reconciles payments and provides statements to Finance.</li> <li>Runs monthly/annual reports.</li> <li>Maintains project files.</li> <li>Schedules inspections.</li> </ul>
Building Inspector II	2.0	2.0	<ul style="list-style-type: none"> <li>Inspects all construction for compliance with Virginia State Building Code, including electrical, mechanical, plumbing, and structural inspections.</li> <li>Senior inspector currently undertaking some plan review; acting as backup to Building Official.</li> </ul>
Building Inspector I	1.0	1.0	
Property Maintenance Official	1.0	1.0	<ul style="list-style-type: none"> <li>Inspects all rental properties on a periodic basis for compliance with the property maintenance code.</li> </ul>
<b>Planning Division</b>			
Comprehensive Planner	1.0	1.0	<ul style="list-style-type: none"> <li>Makes minor updates to Comprehensive Plan (annually).</li> <li>Reviews and updates Comprehensive Plan every 5 years.</li> <li>Acts as staff for Historic Design Review Board and historic design review.</li> <li>Staff liaison for Pedestrian Corridor Committee.</li> <li>Represents Planning on many long range projects/studies.</li> <li>Administers Intern Program (up to 2 staff per semester)</li> </ul>
Zoning Administrator / Senior Planner	1.0	0.0	<ul style="list-style-type: none"> <li>Prepares zoning interpretations and determinations</li> <li>Reviews rezoning and public hearing applications.</li> <li>Supervises zoning inspector.</li> <li>Staff to Board of Zoning Appeals.</li> </ul>

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Planner II/Development Review Administrator	1.0	1.0	<ul style="list-style-type: none"> <li>• Currently fulfilling partial duties of zoning administrator/current planner until position is filled.</li> <li>• Coordinates and manages all planning permits and approvals.</li> <li>• Reviews Planning applications for compliance with zoning regulations.</li> <li>• Administratively approves (or denies) planning applications that do not require review Commission or Town Council.</li> <li>• Prepares staff reports and proposed conditions of approval for projects</li> <li>• Attends and briefs Planning Commission and Town Council on planning applications.</li> <li>• Reviews more building permits for zoning compliance if required.</li> <li>• Signs off on projects prior to close-out.</li> </ul>
Zoning Inspector / Code Enforcement	1.0	1.0	<ul style="list-style-type: none"> <li>• Issues zoning permits and sign permits.</li> <li>• Proactive code enforcement activities.</li> <li>• Responds to complaints regarding zoning violations (cars on grass, over-occupancy of rental units)</li> </ul>

**(2) Engineering and GIS.**

The current organizational structure of the department is shown below:



The following table summarizes key roles and responsibilities of each position within the Department. Some additional job duties are included, but not directly related to Development review have been included to provide a more accurate reflection of overall staff workload.

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Director	1.0	0.0	<ul style="list-style-type: none"> <li>Oversees all engineering and GIS activities, including CIP projects, plan review, inspections, and infrastructure development.</li> <li>Assigns lead engineer to projects as they come in.</li> </ul>
Administrative Assistant	PT	PT	<ul style="list-style-type: none"> <li>Tracks all applications as they come in, tracks comments, ensures review deadlines are met.</li> <li>Process excavation and road closure permits.</li> </ul>
Town Engineer - Construction	1.0	0.0	<ul style="list-style-type: none"> <li>Reviews plans.</li> <li>Attends pre-construction meetings.</li> <li>Conducts field inspections during project constructions to identify and address issues.</li> <li>Capital Improvement Plans (CIP) project management.</li> </ul>
Engineering Field Supervisor	1.0	1.0	<ul style="list-style-type: none"> <li>Reviews plans</li> <li>Attends pre-construction meetings.</li> <li>Conducts field inspections during project construction to identify and address drainage and infrastructure issues.</li> <li>Reviews and inspects CIP projects.</li> <li>Maintains punch list for developer during project close-out.</li> </ul>
Construction Site Inspector	1.0	1.0	<ul style="list-style-type: none"> <li>Conducts inspections in the field to ensure that engineering requirements (stormwater, erosion control, sedimentation control, etc.) are being addressed.</li> <li>Inspects CIP projects.</li> </ul>
Water Resources Manager	1.0	1.0	<ul style="list-style-type: none"> <li>Acts as lead engineer on projects as assigned.</li> <li>Reviews plans to ensure that they meet requirements, standards and specifications in particular as they relate to water distribution systems.</li> <li>Prepares comments on plans; re-reviews plans to ensure comments have been addressed.</li> <li>Calculates connection fees, availability fees,</li> <li>Signs off on completed projects prior to CO issuance.</li> <li>Capital Improvement Plans (CIP) project management.</li> </ul>

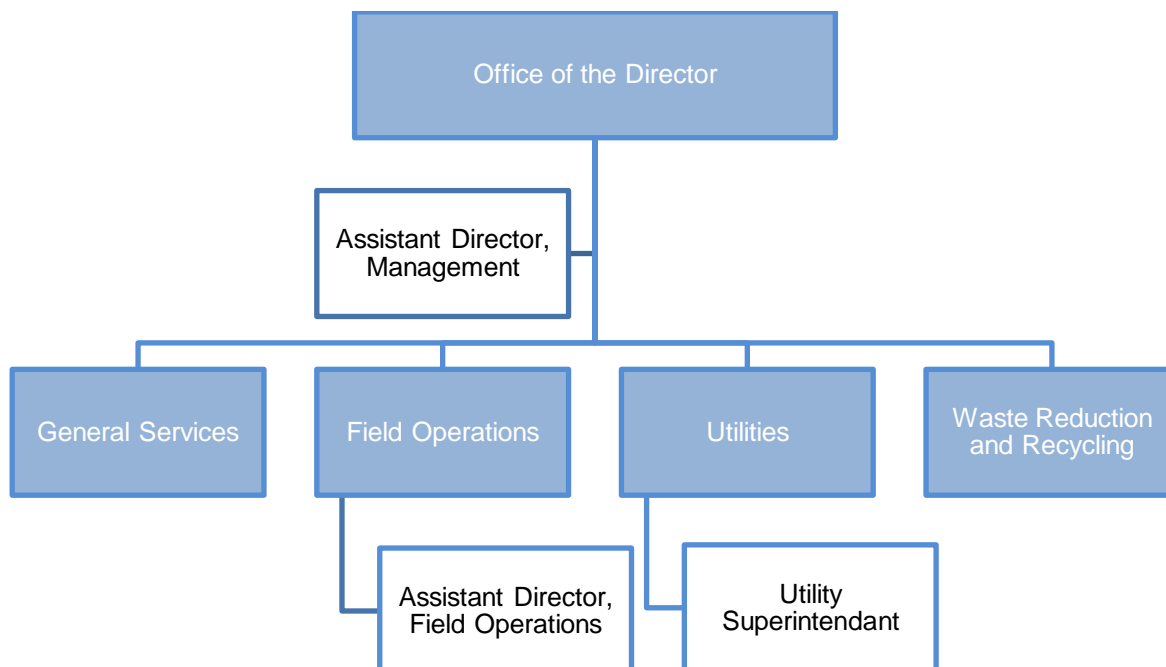


Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Town Engineer - Stormwater	1.0	1.0	<ul style="list-style-type: none"> <li>Acts as lead engineer on projects as assigned.</li> <li>Reviews plans to ensure that they meet requirements, standards and specifications in particular as they relate to stormwater systems.</li> <li>Prepares comments on plans; re-reviews plans to ensure comments have been addressed.</li> <li>Signs off on completed projects prior to CO issuance.</li> </ul>
Stormwater Inspector	1.0	1.0	<ul style="list-style-type: none"> <li>Inspects all projects for compliance with Stormwater regulations.</li> </ul>
Town Engineer – Sanitary Sewer	1.0	1.0	<ul style="list-style-type: none"> <li>Acts as lead engineer on projects as assigned.</li> <li>Reviews plans to ensure that meet requirement standards and specifications in particular as they relate to sanitary sewer systems.</li> <li>Prepares comments on plans; re-reviews plans to ensure comments have been addressed.</li> <li>Designs system extension to for Town projects and private residence sewer connections.</li> </ul>
Water Resource Inspector	1.0	1.0	<ul style="list-style-type: none"> <li>Manages Cross Connection Control Program, including backflow inspections, issues permits, and monitors private inspections.</li> <li>Performs Town’s water sampling for Virginia Health Department water quality compliance.</li> <li>Investigates and responds to citizen’s water quality concerns.</li> </ul>
GIS Coordinator	1.0	1.0	<ul style="list-style-type: none"> <li>Oversees all GIS operations.</li> <li>Provides GIS support to other departments.</li> <li>Supervises GIS technicians.</li> <li>Assigns new addresses for planning and building permits.</li> </ul>
GIS Technician	2.0	2.0	<ul style="list-style-type: none"> <li>Oversees map room and mapping operation.</li> <li>Provides GIS mapping services for new utility installation.</li> <li>Edits GIS layers and digitizes site plans and as-built.</li> <li>Provides technical support to other GIS users</li> <li>Provides support to public GIS systems.</li> <li>Performs addressing.</li> </ul>

**(3) Public Works.**

The Public Works department consists of 77 Full Time positions and 12 Part Time positions. The majority of these Town employees are not involved directly or indirectly with the development review and inspections process. However, specific

positions are designated with responsibility for reviewing plans that involve extensions of infrastructure, managing utility work to be undertaken by the Town, and testing and accepting new utility extensions. The organizational chart below highlights the key positions involved in development review and how they fit in with the overall structure of the department.



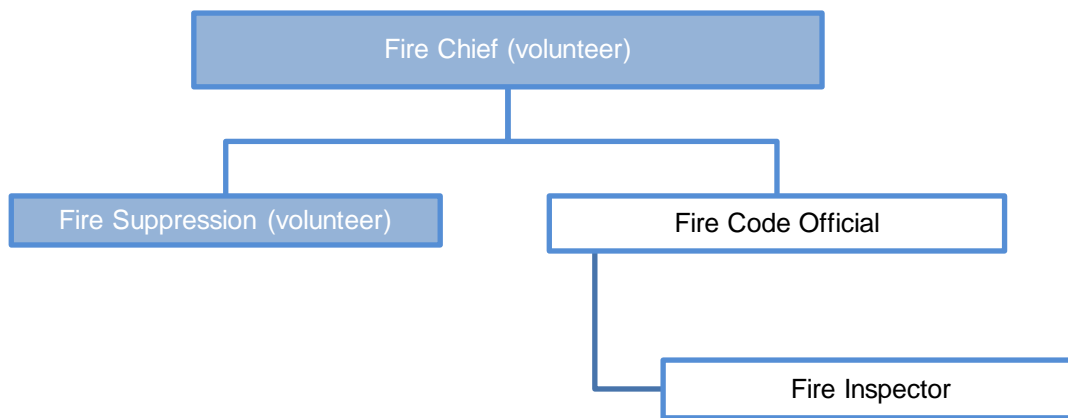
The following table summarizes key roles and responsibilities of each position within the Department.

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Utility Superintendent	1.0	1.0	<ul style="list-style-type: none"> <li>• Attends pre-construction meetings.</li> <li>• Reviews all plans for feasibility of utility extension work.</li> <li>• Prepares cost estimates for water and sewer main extensions.</li> <li>• Prepares work orders for work to be done by the town.</li> <li>• Inspects new water and sewer systems prior to acceptance by the town.</li> <li>• Processes water meter requests.</li> </ul>

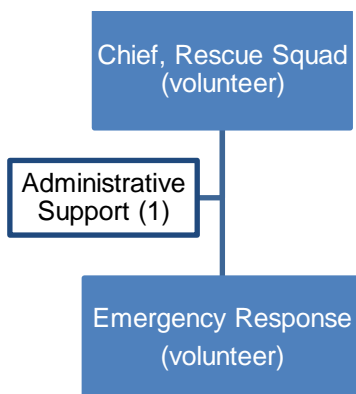
Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Assistant Director – Field Operations	1.0	1.0	<ul style="list-style-type: none"> <li>Supervises streets, transportation/traffic signals, storm sewer, water, and sanitary sewer maintenance teams.</li> <li>Reviews development plans as needed</li> <li>Oversees in-field changes</li> </ul>
Assistant Director, Management	1.0	1.0	<ul style="list-style-type: none"> <li>Coordinates all plan reviews.</li> <li>Point of contact for plan reviews.</li> <li>Attends pre-construction meetings.</li> <li>Assists in-field inspections as needed.</li> </ul>

**(4) Public Safety.**

The Fire Department is an entirely volunteer-staffed organization, with the exception of the Fire Code Official and one Fire Inspector. These two positions are full time, with substantial involvement in the Development Review Process.



The Emergency Rescue department is a fully volunteer staffed department.



The following table summarizes key roles and responsibilities of each position within Fire and Rescue involved in the development review process.

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Fire Code Official	1.0	1.0	<ul style="list-style-type: none"> <li>Attends pre-construction meetings.</li> <li>Reviews site plans for fire truck accessibility and water supply.</li> <li>Reviews fire alarm and fire suppression plans.</li> <li>Conducts final inspection of commercial buildings prior to CO issuance. Coordination handled in conjunction with Building staff.</li> <li>Oversees required testing of fire alarm and suppression systems.</li> </ul>
Fire Inspector	1.0	1.0	<ul style="list-style-type: none"> <li>Assists with inspections and testing of systems.</li> </ul>

Unit / Position(s)	No. of Positions		Key Roles and Responsibilities
	Auth	Cur.	
Chief, Rescue Squad	Volunteer		<ul style="list-style-type: none"> <li>Provides input if needed on site plans and building plans with regard to ambulance and stretcher access.</li> </ul>

### **3. WORKLOAD**

The following sections summarize key workload measures for each department / division involved in the development review process.

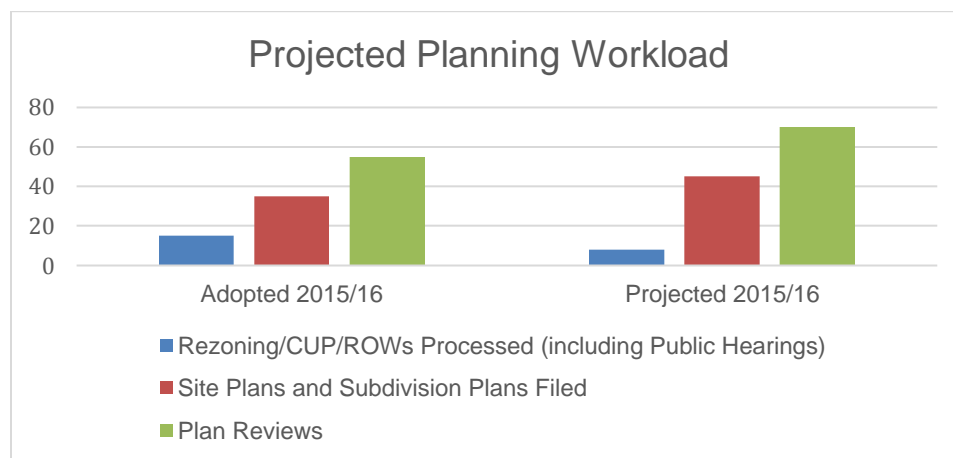
**(1) PLANNING.**

The Planning office has processed between 9 and 18 Rezoning/CUP/ Right of Way permits per year over the past six years, and between 22 and 54 site plans and subdivision plans. Also, planning staff has processed between 42 and 83 plan reviews annually since 2010, with an historic average of 54 plan reviews per year. The below table indicates actual workload levels by year by type of application (as reported in the budget).

**Historic Planning Workload**

Review Type	2010	2011	2012	2013	2014	2015	Average
Rezoning/CUP/ROWs Processed	14	9	13	14	18	11	13
Site Plans and Subdivision Plans Filed	31	39	22	27	31	54	34
Plan Reviews	42	61	43	45	51	83	54

Projected workload is somewhat higher than was anticipated in the budget for 2015/2016.



**(2) ENGINEERING.**

Workload related to private development within Engineering is directly tied to the number of applications and reviews managed by Planning. Two specific measures of

Engineering workload associated with development are: Acre-Weeks of inspection for erosion and sedimentation inspection compliance and total site development inspection fees. Engineering workloads have fluctuated from 1,076 to 3,609 acre weeks of erosion and sediment compliance with a five-year average of 1,946. Site development inspection fees pad has ranged from a low of \$50,346 in 2010 to a high of \$91,510 in 2015. Average site development inspection fees collected was \$77,808 since 2010.

**Historic Engineering Workload**

<b>Review Type</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Erosion & Sedimentation Compliance (Acre-Week)	1,076	3,609	2,176	1,625	1,245	1,946
Site Development Inspection Fees Paid	\$50,346	\$91,247	\$66,136	\$89,799	\$91,510	\$77,808

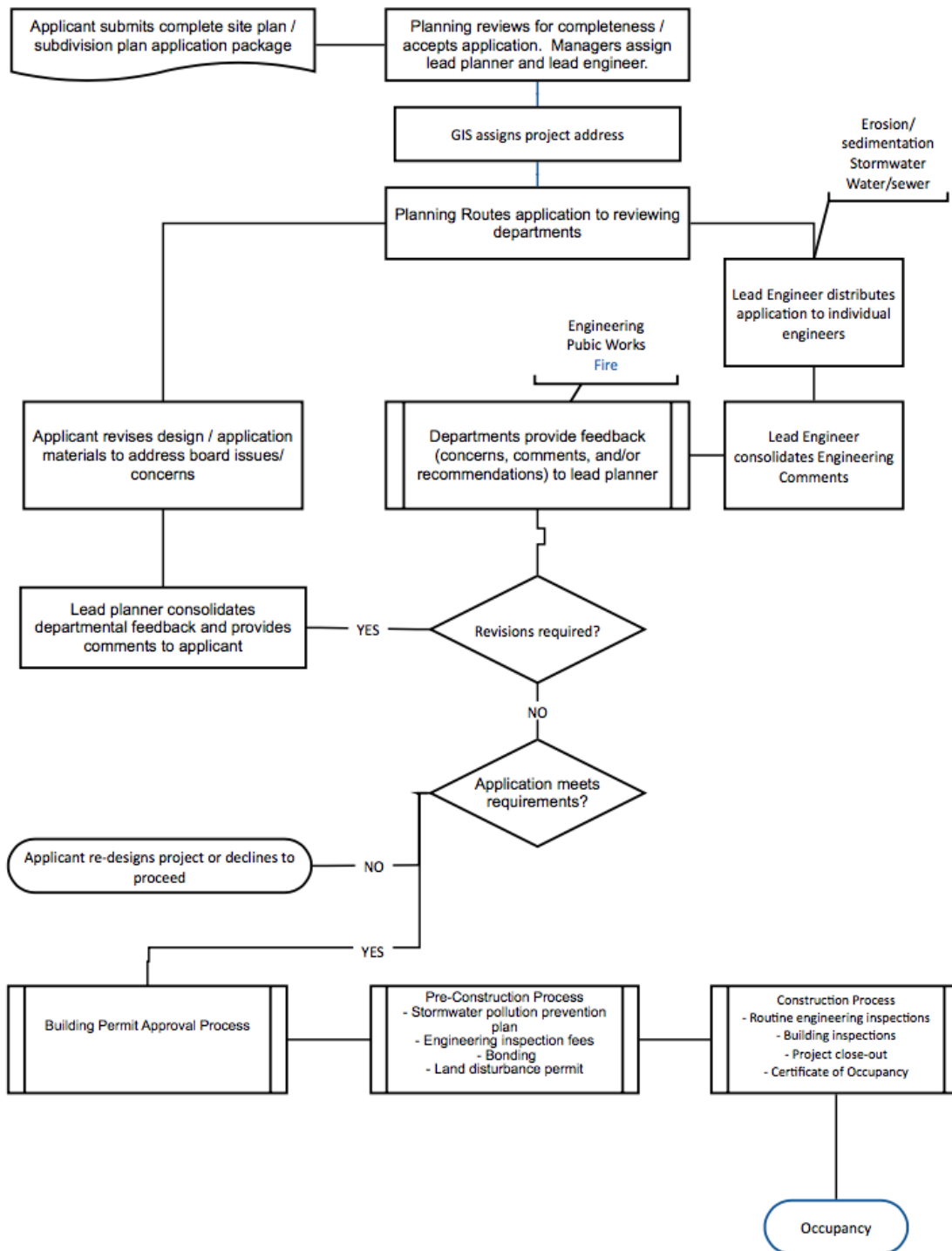
**(3) BUILDING.**

The Building Division has issued between 1,761 and 1,900 building permits. These range from simple over the counter trade permits to permits for highly complex residential developments. The Department does not currently provide data to distinguish between types of permit, or regarding reviews undertaken by other departments; as a result, the below chart includes all building permit reviews but does not break them out by type or complexity. The number of building permits applications received has ranged from 1,378 in 2010 to 2,837 in 2015. With a five-year average of 1,904 permits per year since 2010. The number of building inspections performed has ranged from a low of 4,050 in 2011 to a high of 7,387 in 2014 with a five-year average of 5,659 inspections per year.

<b>Review Type</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Building Permit Applications	1,378	1,683	1,861	1,761	1,904	2,837	1,904
Inspections Performed	4,269	4,050	4,939	6,666	7,387	6,645	5,659

**5. PROCESSES**

A. Planning Permits (subdivisions, site plans, etc.)



All planning permits are taken in by the department's Office Manager, who plays a coordination role in the permitting process. An assigned lead planner is responsible for the overall review process, including consolidating comments from different review agencies. Within Engineering, a lead engineer distributes plans to specialists in stormwater, erosion and sedimentation controls, and utilities (water/sewer) and consolidates these comments before they are provided to the Planner.

## **B. Building Permits**

Building Permit applications are taken in by Permit Techs. Trade permits (electrical, mechanical, plumbing) may be approved on the spot but must be physically signed by the Building Official. For more complex projects, the Permit Tech, in conjunction with the Building Official, determines whether additional reviewers will be required. The following reviews may be required:

- GIS (if an address assignment is required)
- Planning (for certain zoning issues and questions). The building inspector will review for basic zoning issues, such as setbacks or lot coverage. Projects that have been through planning review do not need to be re-reviewed at this point.
- Engineering (if stormwater or other requirements may be triggered). Projects that have been through planning review typically do not need to be re-reviewed at this point.

Building permits are not reviewed by the Fire Code Official.

Virtually all plan review is performed by the Building Official. For plans that require review and cannot be issued on the same day, resubmissions and small residential projects are reviewed first, to prevent them from being placed in line behind a large, complex commercial project that may take several weeks to review. Recently,



the Town has incorporated the limited use of 3<sup>rd</sup> party plan reviewers, in regard to large scale projects, or projects that the applicant desires to be processed more quickly.

## **6. TECHNOLOGY.**

The following table summarizes the primary software systems utilized as part of the development review process.

<b>Software</b>	<b>Purpose / Utilization</b>
CRW (TRAKiT Land Management) Version 2014.04.29	Permit Tracking and Reporting; Inspections Scheduling; Site Plans, Subdivisions, Rezoning, Conditional Use Permits, and other Planning applications.
GIS	Address and parcel management, land use information, infrastructure information.
Laserfiche	Document Management

## **7. PROCESSING TIMES.**

Within the Planning department, 100% of plans have been reviewed within the statutory deadline of 60 days based upon data received from the Town. The following table summarizes processing times as reported in the annual budget. Over the past six years, all planning applications were processed within the statutory deadline, except in 2012 when only 98% were processed in time. Furthermore, 91% of applications were processed within 45 days of application, and 61% were processed within the first 30 days. Further evaluation of the data will be conducted during the best practices assessment, once the data is made available to the project team. This data indicates actual performance for Planning reviews, which incorporate reviews from Engineering and other departments:

**Planning Application Processing Times**

<b>Site Plan Review Timelines</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Within statutory deadline	100%	100%	98%	100%	100%	100%	100%
Within 45 days	93%	95%	86%	91%	86%	94%	91%
Within 30 days	62%	75%	58%	53%	69%	50%	61%

Based on currently available data, building permit review turnaround times do not distinguish between minor over the counter permits and permits for more complex projects. The following table summarizes processing times as reported in the annual budget. On average, 75% of building permits were issued within one (1) business day of submittal. Further evaluation of the data will be conducted during the best practices assessment, once the data is made available to the project team.

**Building Permit Issuance Timeline**

<b>Building Permit Issuance</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Issued Same Day	66%	52%	54%	55%	55%	37%	53%
Issued within 1 Day	79%	74%	76%	80%	80%	62%	75%

Based on historic data, building inspections performed on the day requested was analyzed. Historically, the six-year average of 85% of inspections have been completed on the day requested. The percentage of inspections completed on day requested has declined since 2010 and 2011. The decrease in the number of inspections completed on the day requested, has a strong correlation with the increase in the number of inspections performed. Further evaluation of this correlation will be discussed during the best practices assessment and recommendations section of the report. The following table summarizes the percentage of inspections completed on day requested:

**Building Inspections on Day Requested**

<b>Building Inspections</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
% on Day Requested	99%	98%	90%	90%	75%	60%	85%

**8. CODES ENFORCED**

The following points summarize the major ordinances, codes and regulations enforced by the Town of Blacksburg:

- Code of Blacksburg, Chapter 6 (Building Regulations) adopting the Virginia Uniform Statewide Building Code (Part 1, General and Part 2, Construction), International Building Code, International Residential Code.
- Code of Blacksburg, Ordinance 1137, Appendix A, Zoning Regulations.
- Code of Blacksburg, Ordinance 1217, Appendix A, Subdivision Regulations.
- Code of Blacksburg, Chapter 10 (Erosion and Sedimentation Control).
- Commonwealth of Virginia Uniform Statewide Building Code.
- Commonwealth of Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq.).
- Commonwealth of Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq.).
- Commonwealth of Virginia Erosion and Sedimentation Control Handbook.

## **B. BEST PRACTICES ASSESSMENT**

### **1. INTRODUCTION**

This document provides an initial assessment of the Town of Blacksburg Planning and Building, and Engineering and GIS Departments against a set of best management practices. In order to make an assessment of operational strengths and improvement opportunities, the project team utilized a set of best management practices against which to evaluate these Departments. These performance measures compose the main thrust of this diagnostic assessment.

The measures utilized have been derived from the project team's collective experience, and represent the following ways to identify strengths as well as improvement opportunities:

- Statements of effective practices based on the project team's experience in evaluating operations in other agencies or industry standards from research organizations.
- Identification of the strengths of departments in meeting these performance targets.
- Identification of opportunities for improvement in current practices in comparison to these performance targets.

The purpose of the diagnostic assessment was to develop an overall assessment of the permitting operation performance and conformance to recognized practices and procedures.

### **2. KEY STRENGTHS**

Several aspects of the Town's Community Development Department are exemplary. Examples are as follows:

- Development projects are assigned a project manager who is responsible for the routing of plans and compilation of comments from different agencies.

- Planning staff is cross-trained to provide support on a wide range of projects. Also, planning staff is capable of producing GIS maps and products.
- Building inspection staff are cross-trained, eliminating duplicative inspections for building, mechanical, and electrical systems.

### **3. KEY IMPROVEMENT OPPORTUNITIES**

The comparison of the Department's current practices to best management practices also identified several areas where improvements could be made. Some of the most notable opportunities for improvement are listed below:

- While the Department has software in place to track and manage both land use and building approvals, many elements of the system are under-utilized. Expanding the software to allow applicants to submit proposals electronically, track project approvals on-line, and look up inspection results would improve customer service and communication. Internally, more extensive use of the system would ensure better communication between reviewers.
- Performance targets and data collected on workload and turnaround time are highly aggregated and do not provide clear information for managers or applicants.
- The department faces significant variations in work volume, in particular with major commercial or student-housing projects as well as seasonal variations in workload related to Virginia Tech. A single major commercial project can divert 1/3 or more of the department's inspections capabilities for weeks at a time, leading to delays for other applicants.
- The project close-out process is complex and unpredictable for some applicants, who may not understand some of the requirements that must be met before a CO can be issued or how to meet these requirements.

### **4. DETAILED BEST MANAGEMENT PRACTICES ASSESSMENT.**

The following table presents the list of best management practices used by the project team, as well as their determination of the Town's performance against each standard, identifying whether it is a current strength or a potential opportunity for improvement.

Best Management Practice	Strengths	Opportunities for Improvement
<b>MANAGEMENT AND ADMINISTRATION</b>		
<p>1. The department has developed goals, objectives, and performance measures to guide decision-making, linking the division's actions to the long-term plan of the department.</p>	<p>The division and department have performance goals, reported in the budget, and produce monthly reports regarding permit volumes and turnaround times.</p>	<p>Some performance measures focus on volume of work rather than efficiency or speed. Others are highly aggregated (for example, turnaround time for building permits does not differentiate between minor permits and major commercial construction projects), making it difficult to assess performance in key areas. Clearer and more comprehensive performance measures and reporting would allow management to better evaluate department operations and communicate with customers.</p>
<p>2. The organizational structure is clear with a maximum of three organizational layers and maximum span of control of eight.</p>	<p>Within Planning and building there are a maximum of two organizational layers under the director. Staff know who they report to on a daily basis.</p>	<p>Within Engineering, roles and responsibilities are highly specialized, potentially leading to more reviews and inspections than would be required with some consolidation of roles.</p>
<p>3. Customer satisfaction for the division is regularly monitored.</p>	<p>Business Climate Task Force has surveyed customers of the development process and reported on findings.</p>	<p>The department does not have a systematic process for surveying customers or analyzing/reporting on customer satisfaction.</p>
<p>4. There are well-documented policies and procedures in place to govern the actions of division employees.</p>		<p>Each position should have a formal desk reference manual outlining policies and procedures followed by staff in that position.</p>
<p>5. The department has backup plans and succession plans in place in the event of absence or departure of key staff.</p>		<p>The department lacks clear succession plans and emergency backup plans for unexpected or prolonged staffing changes. This is especially the case in Building, where until recently only the Building Official has been responsible for plan review.</p>

**Town of Blacksburg, Virginia**  
**Evaluation of the Development Process**

Best Management Practice	Strengths	Opportunities for Improvement
6. The department provides easy-to-understand and attractive guides to the planning, building permit, inspections, and close-out process.	Information is available on-line for some elements of the process.	Applicants would benefit from development guides that provide a greater overview of the entire process, including pre-application, planning review, building review, inspection, and close-out.
7. All development staff are available at a single, easy to access location.	Planning, building, and engineering staff are in a dedicated building, promoting communication between reviewers and a single point of contact for applicants.	Planning and building clerical staff are physically separated and not cross-trained.
8. The department reaches out to the business and development community through periodic communications.	The department is cooperating closely with the Town's business climate task force and other stakeholders.	The Department/Town should develop a monthly newsletter that includes relevant information regarding permitting and development activities in the Town.
9. The department holds regular meetings with the development and construction community.	The department meets bi-weekly with developers of major projects during the construction and construction close-out process. The department manager is also working with the business climate task force.	The Department should provide more general (e.g., non project specific) forums for identifying and resolving issues between the Town and the development / building community.
<b>PLANNING</b>		
10. Long range planning –The town maintains an up-to-date plan and reviews zoning regulations for consistency with the current plan.	Comprehensive planning staff update the Comprehensive Plan yearly with requested updates. Also, staff conduct a full update every 5 years. Planning staff contribute to special projects (corridor committee, public arts committee, and community relations) to ensure long range plans incorporate the objectives of these projects.	
11. The Town's long term plans and zoning code are available on-line.	Comprehensive Plan and Zoning Ordinance are located on-line in multiple places.	Other studies and plans should be readily accessible on-line.

**Town of Blacksburg, Virginia**  
**Evaluation of the Development Process**

Best Management Practice	Strengths	Opportunities for Improvement
12. The Town's policies/website clearly identify what applications can be approved administratively versus approval by Planning Commission or Town Council.	This information is available at a very high level on the Town's web site.	The web site should include more detail regarding the approval process for both administrative and Planning Commission/ Town Council projects.
13. The Planning department provides clear and comprehensive checklists identifying all items required to be submitted for each application type.	Application checklists are available on-line and include requirements for planning, engineering, and traffic.	Planning checklists could be clarified / revised based on recent experience by staff regarding common deficiencies in applications.
14. Planning application forms Are available on-line and can be filled out electronically.	Copies of forms are on-line.	All forms require printing and filling out by hand, as well as physical submittal.
15. The department offers a pre-application process so that the applicant can obtain input from various review agencies before preparing a complete submittal.	Planning currently offers a pre-application meeting.	Pre-application meeting is voluntary and may only include a small number of staff.  Engineering staff could be brought in more consistently to look at projects at the pre-submittal phase.
16. The department uses a case management approach to oversee the review of all planning applications.	Planning acts as case manager, distributing plans and consolidating comments from different agencies and providing a single set of comments to the applicant.	
17. Processes and time-lines for review and approval of planning applications are established and clear.	The application clearly states statutory deadlines for initial and subsequent reviews by the Town. Engineering has internal time-lines to ensure that they can meet the Town's overall deadlines.	Data regarding actual turnaround times or more specific commitments regarding response times from the Town would improve predictability.



Best Management Practice	Strengths	Opportunities for Improvement
18.Planning has a processes in place to prevent numerous resubmittals.	Plan review fee covers up to 2 reviews; additional reviews require an additional fee. This encourages comprehensive submittals by the applicant and comprehensive reviews by staff. In addition, if a 3 <sup>rd</sup> review is required by engineering, the engineering reviewer must identify the specific items missed by the applicant.	
19.A formal Development Review Committee is in place to oversee permit applications.	Review committee is in place and meets every Monday.	Agenda and attachments are distributed the Friday before the meeting, providing little time for meeting preparation.
<b>BUILDING PERMITTING</b>		
20.Building department staff will meet with an applicant prior to submittal to review and identify key issues with the project.	Building official participates in DRC meetings and can identify/communicate key building code issues during the planning stage. In addition, pre-application meetings are offered.	
21.Applicants are given clear information about building permit requirements as well as other requirements from other departments.		<p>For projects that have not gone through the planning process, applicants may not be made aware of stormwater and erosion control requirements at time of application.</p> <p>Building should work with Stormwater Engineer to develop clearer educational materials on Stormwater requirements.</p>
22.Certified permit technicians take in applications and assess them for completeness before acceptance.	The building division uses a permit technician to review plans and determine whether they are ready to review One permit technician is trained to review zoning regulations for single-family permits.	Equip second permit technician to review single-family permits for zoning regulations.

**Town of Blacksburg, Virginia**  
**Evaluation of the Development Process**

Best Management Practice	Strengths	Opportunities for Improvement
23. The department provides easy-to-understand and attractive guides to the building permit and inspection process.	Information is provided on-line, including development checklist, forms, inspection requirements, and permit requirement thresholds.	Some information is difficult to find on the web site; information is primarily focused on application requirements. All forms must be filled out by hand.
24. Simple permits (e.g., basic electrical, mechanical, and plumbing permits and minor building alterations) can be issued on the spot with no review, subject to inspection.	Trade and minor building permits are reviewed and issued on the spot or same day.	All permits require physical signature from the building official; if the building official is not available, permit cannot be issued.
25. Resubmittals and projects requiring minimal review (e.g., small residential projects) are given priority in the review queue.	Currently using this approach.	
26. Permit applications are distributed to different review agencies by a single point of contact within the Building department; plans are reviewed concurrently by all agencies to reduce turnaround times.	Permit tech manages much of the review process including routing and distribution of plans.	Building review does not commence until GIS has assigned an address (if required) and planning has completed review (if required).
27. Comments from different reviewers (engineering, zoning, building) are consolidated before being provided to applicant.	Project manager consolidates comments and provides a single response letter to applicants.	For each department's comments, provide the reviewers name and contact information, so that developer may contact review for direct clarification of comments.
28. For re-submitted plans, reviewers focus on ensuring that comments have been addressed and do not identify issues that should have been brought up in initial review.	Developer is advised on resubmittal requirements in comment letter.	The Department should have formal policies in place regarding revision comments to ensure that initial reviews are comprehensive; new comments should only be provided if the project scope has changed significantly or if serious life-safety issues are at stake.

**Town of Blacksburg, Virginia**  
**Evaluation of the Development Process**

Best Management Practice	Strengths	Opportunities for Improvement
29. First permit review is completed within 14 business days and 90% of permits are approved within 2 revision cycles.	55 % of permits are issued same day and 80 % within 5 days.	Time from submittal to first review is not tracked. Number of revision cycles is not tracked.
30. Review time objectives for plan checking are posted to the Department's web site.		Performance standards are not publicized. Internal reports regarding turnaround times do not distinguish between types of projects, making actual performance difficult to assess.
31. The division contracts out for services where required expertise is not available in-house.	Recently allowed projects to be reviewed and inspected by third-party agencies.	The department is not consistent in determining when to use or allow applicant to use contract inspectors or outside plan review.
32. Customers are given an approximate time to expect their inspector.	Staff works with customers to provide a general time of arrival for inspection.	
33. Applicants can request inspections up to 5 pm on the day before; next day inspections should be available for 100 % of requests.	Applicants may call up to 7 a.m. the day of the desired inspection to request. Next day inspections are generally available.	Initial data indicates that 75 % of inspections are available on the day requested. Time frame from request to actual inspection is not tracked.
34. Inspectors conduct between 15 and 25 inspections per day.		Initial data indicate that inspectors may conduct as many as 70 inspections per day; however, this may include combination inspections. Clearer reporting on inspection volumes by type of inspection would allow for better analysis of workloads.
35. An automated voice-activated inspection request system is utilized to receive inspections with linkage to the permit information system.	Permit techs schedule inspections directly into permitting software based on knowledge of staff availability and project scope.	Inspection requests must be called in to Permit Technicians, automated system could create efficiencies.

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Best Management Practice	Strengths	Opportunities for Improvement
36. Combination reviewers/ inspectors are used to reduce the need for duplicate inspections at a single project.	Inspectors are cross trained for field work.	Currently training one inspector to perform plan review along with inspectors.
37. The department charges a re-inspection fee to encourage builders to make sure work is complete and ready to inspect at time of inspection.	Department has a \$50 inspection fee.	Fee is not applied consistently.
<b>ENGINEERING</b>		
38. The Town uses a pre-application process to provide guidance to the applicant.	As outlined under Planning, this process is used but does not always include Engineering staff.	
39. For projects submitted through Planning but requiring engineering review, all engineering submittal requirements are available in Planning and communicated by the Planning staff at time of submittal.	Engineering checklists are provided by Planning and available on-line.	Checklists could benefit from updating.
40. Comments from different engineering reviewers (water, waste water, storm sewer) are consolidated before being provided to applicant.	Comments are vetted by Engineering Director and provided to Project Manager (Planning staff)	Use of multiple reviewers for a single project in Engineering may improve technical quality of review but may lead to inconsistency and inefficiencies.
41. Cycle time objectives for plan checking are clearly established.	Timeline is typically managed by Planning; Engineering has interim deadlines to ensure Planning requirements are met.	
42. Collaboration between Engineering and Planning/ Buildings is frequent.	Staff from both departments have frequent interactions to discuss projects.	
43. Applicant attends a pre-construction meeting where construction requirements are clearly communicated.	For larger projects, mandatory pre-construction meeting is held at which time stormwater and erosion control plans are approved.	

Best Management Practice	Strengths	Opportunities for Improvement
44. The applicant is clearly informed of all requirements associated with project close-out.	Staff from planning, building, and engineering meet with builders every 2 weeks to prepare for project close-out.	Use of pre-closeout meetings (or electronic communications) could be expanded to include smaller projects.  Departments should develop a clear checklist of all project close-out items, to be customized by project, and have builders/developers sign-off on requirements.
45. As-builts are required and reviewed prior to CO issuance.		As builts are not consistently provided.
<b>GIS AND TECHNOLOGY UTILIZATION</b>		
46. Applicable data layers are digitized.	Maps and site plans are digitized and accessible via GIS or LaserFische.	
47. Development staff has access to applicable GIS layers.	All staff can view GIS on desktop computers. Some Planning staff have ability to create maps/layers.	Some elements of GIS may be underutilized by staff due to a lack of training.
48. Site plans/as-builts are submitted and stored digitally.	When available, plans are digitized and then stored digitally.	Approved plans should be submitted digitally by the applicant and attached to the permit record in CRW.
42. A single system is used to track planning, building and engineering, information so that there is a consolidated source of data on activities by address.	CRW is used for building permitting and inspection process.	Consolidation of all submitted project comments into CRW will allow one-stop program for all project files.

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Best Management Practice	Strengths	Opportunities for Improvement
<p>43. An automated permit information system is utilized to:</p> <ul style="list-style-type: none"> <li>• Accept and issue permits.</li> <li>• Accept payments for permits.</li> <li>• Provide clear information regarding approvals by different agencies.</li> <li>• Manage the processing time for sign-offs.</li> <li>• Facilitate customer service through access to the internet.</li> </ul>	<p>CRW is used to track permit and inspection information internally.</p>	<p>Department could significantly expand use of permitting software to streamline communications, reduce paper, and improve customer service.</p>
<p>44. Planning and Building applications can be submitted electronically.</p>	<p>Currently all applications are paper-based.</p>	<p>Applicants should be able to submit, pay for, and receive permits electronically.</p>
<p>45. Inspectors can enter information in the field via tablet and have it instantly available and viewable on-line.</p>	<p>Currently in testing phase for mobile usage of the software and for limited view ability of information.</p>	
<p>46. Inspectors have remote access to documents at Town hall to expedite the inspection process.</p>		<p>Field access would expedite inspections and improve communication across agencies.</p>
<p>47. Historical information on properties, including code enforcement, permitting, zoning, land use, flood, and related issues is available on-line.</p>	<p>Historical permit information is available through CRW and Laserfiche.</p>	<p>Moving forward, approved site and building plans should be obtained digitally and attached to permit in CRW or linked through Laserfiche.</p>
<p>48. Current property information is available on-line.</p>	<p>Web-GIS system provides detailed layers regarding zoning and flood and is available to the public.</p>	

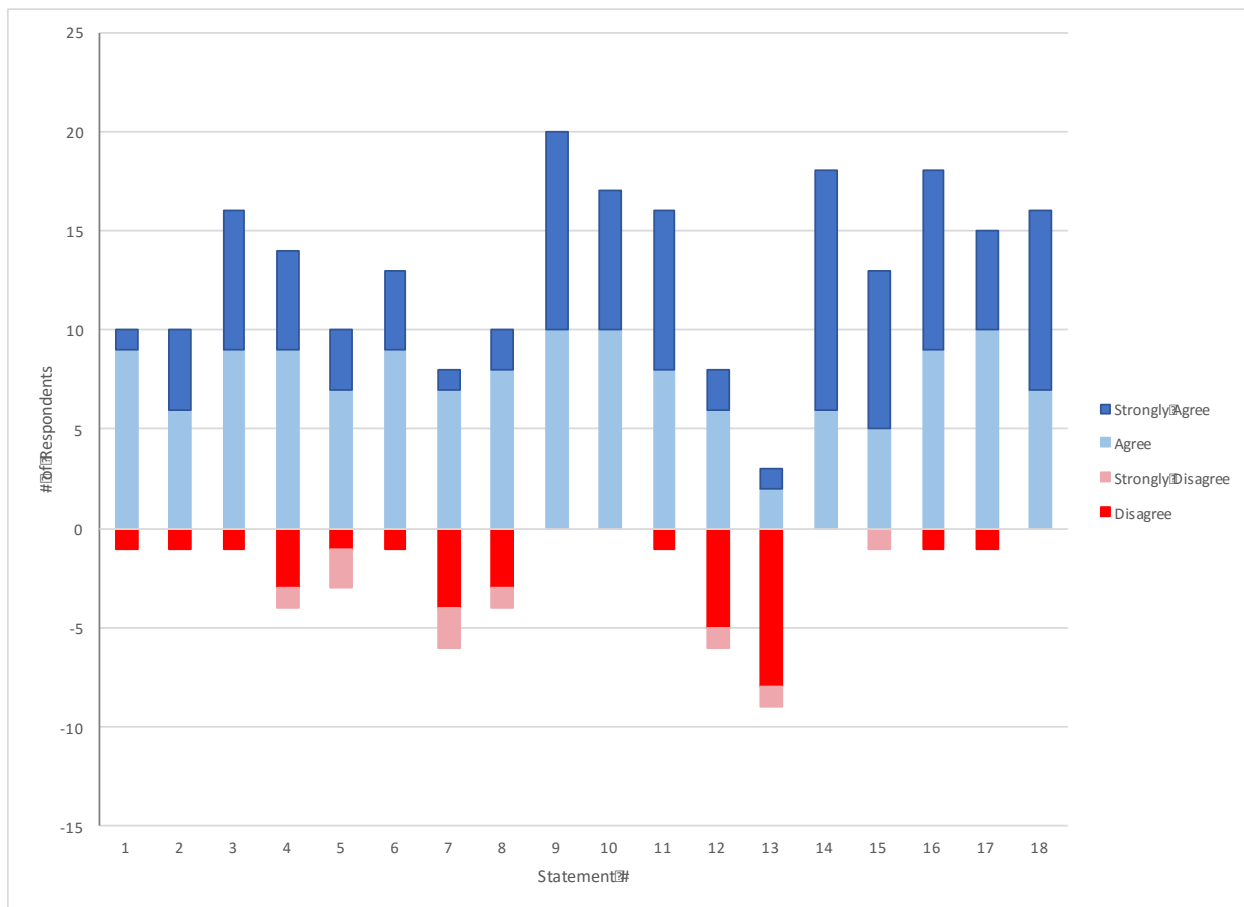
## **C. SUMMARY OF EMPLOYEE SURVEY**

The Matrix Consulting Group conducted an employee survey of the Town of Blacksburg to allow employees the opportunity to provide confidential input with regard to organizational, operational, and other issues within their departments. This survey was conducted as part of the Development Review and Permitting Process Study. Employees were asked to respond to a series of questions that are posed as a series of statements relating to topics covering departmental service level, staffing and operations. The table below shows the response distribution by department.

<b>Department</b>	<b>No. of Respondents</b>	<b>% of Total Respondents</b>
Planning	6	26%
Building	7	30%
Engineering	7	30%
GIS	3	13%
<b>Total</b>	<b>23</b>	<b>100%</b>

There were a total of twenty-three (23) respondents to the survey representing an overall response rate of 88%. To gain a sense of the responses from the statements by general topic of the employee survey (e.g., customer service, supervision and management, workload, etc.), it is useful to look in greater detail at the topics that elicited the strongest positive and negative responses. The chart, found below, plots the distribution of positive and negative responses for each statement.

**POSITIVE-NEGATIVE RESPONSE  
DISTRIBUTION FOR ALL STATEMENTS**



Overall, 64% of responses received were positive (i.e., either ‘strongly agree’ or ‘agree’). The sections, which follow, present the survey results. Statements have been group by general topic and do not necessarily appear in the order presented in the survey instrument.

**1. DEVELOPMENT REVIEW SERVICES**

Employees were asked to evaluate statements regarding services provided to the community. The summary, below, presents the response distribution for each statement relating to services.



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Statement	Agree	Disagree	No Opinion/ Not Applicable
1. Permitting processes in the Town are neither unnecessarily complex nor burdensome on the applicant.	45%	5%	50%
2. I am able to consistently meet the Town's goals for plan review or permit timelines for the processing of development review plans or permits.	45%	5%	50%
3. My division is effectively managed as it regards the development review and permitting processes.	73%	5%	23%
4. My division has an efficient records management and document management system.	64%	18%	18%
5. My department has clear, well-documented policies and procedures to guide my involvement in the plan review and permitting process.	45%	14%	41%
6. Permit review, and the interpretation of codes and ordinances associated with permit review, is undertaken in a consistent manner by staff.	59%	5%	36%
7. I am able to effectively utilize permit information systems and technology to track turnaround time for permits, record comments, corrections for permits and conditions of approval, and track other aspects of permitting.	36%	27%	36%
8. The Town makes it easy to obtain complete, accurate information about all aspects of the development review and permitting process.	45%	18%	36%
9. The Town has a robust geographical information system that I am able to utilize on a day-to-day basis in the accomplishment of my work.	91%	0%	9%
10. The Town's development review and permitting procedures ensure that applicants are advised of all application requirements and standards early in the process.	77%	0%	23%
11. Applicants have easy access to staff in the development review and permitting process to obtain information about their application and approval requirements.	73%	5%	23%
12. I receive sufficient formal ongoing training in the technical skills required to fulfill my role in the development review and permitting process. We have a strong emphasis on training.	36%	27%	36%
13. Most of the time, the applications submitted by applicants are complete and adequate to allow prompt and complete action by staff.	14%	41%	45%
14. Customer service is a clear and driving force in the development review and permitting process.	86%	0%	14%
15. Overall, decisions regarding interpretations in my division / department are made consistently, with little variation from applicant to applicant.	59%	5%	36%
16. Overall, my division is efficient and well-run in terms of the services it delivers.	82%	5%	14%
17. The development review and permitting process in this Town is an efficient, well-run process.	68%	5%	27%

Statement	Agree	Disagree	No Opinion/ Not Applicable
18. There is good coordination between my division and other departments / divisions that are involved in the development review and permitting process.	73%	0%	27%

Overall, employees maintained positive perceptions with respect to the services provided by their departments. Employees felt that customer service was an important aspect to their job. For the above statements, there was a fair amount of no opinion/ not applicable since a portion of the staff is not involved in the development review process.

- Of the respondents, a majority of employees who agree or disagreed, believed that the permitting process was not burdensome or complex.
- A majority (68%) believed that the development review and permitting process in Blacksburg is efficient and well-run process. Also, 86% of employees felt that customer service is a clear and driving force in the review and permitting process. Only 73% of employees felt that staff was easily accessible to applicants.
- 77% of employees felt that the applicant was well advised of the application timeline and approval process early in the application process.
- Only 45% of employees felt that there was well documented policy and procedures for their involvement in the plan review process. A higher percentage (59%) of employees felt that Permit review, and the interpretation of codes and ordinances associated with permit review was provided in a consistent manner. Only 45% of employees felt that the Town made it easy to obtain accurate information on the development and review process.
- 82% of employees felt that their division was efficient and well-run in regard to the services it delivers. 91% of employees felt that the GIS system was adequate to meet their needs.
- Only 14% of employees felt that applications were complete and adequate to provide prompt action by staff.

## **2. WORK ENVIRONMENT**

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Respondents were asked to evaluate statements regarding their work environment. As shown in the chart below, the majority of responses (68%) were positive with respect to statements about work environment.

Statement	Agree	Disagree	No Opinion/ Not Applicable
1. I know what is expected of me at work.	91%	5%	5%
2. I have the materials, equipment, and tools I need to do my work right.	73%	9%	18%
3. The mission / purpose of this organization makes me feel my job is important.	77%	5%	18%
4. My co-workers are committed to doing quality work.	95%	0%	5%
5. I have opportunities to learn and grow.	86%	5%	9%
6. My opinions seem to count.	73%	18%	9%
7. Someone at work encourages my professional development.	82%	9%	9%
8. There is good teamwork and communication between the different divisions and / or departments.	82%	0%	18%
9. When mistakes are made, managers and supervisors focus on correcting the mistake with a learning approach rather than on placing blame.	59%	14%	27%
10. I am empowered to act within the scope of my expertise, training, and experience.	91%	5%	5%
11. Managers in my Department are receptive to new ideas and employee suggestions for improvements in the permitting process.	64%	9%	27%
12. To continuously improve our permitting process, I am encouraged to question the way we do things in this Town and to offer constructive suggestions.	41%	23%	36%
13. This Town encourages practical risk-taking and supports positive efforts in improving the development review and permitting process.	23%	0%	77%
14. Everyone is encouraged to solve problems together regarding the plan review and permitting process.	73%	5%	23%
15. Managers actively involve the staff in working together to solve problems.	68%	9%	23%
16. I receive enough recognition and appreciation for the quality of my work.	45%	23%	32%
17. There is free and open communication between all levels of employees involved in the development review and permitting process about the work they are performing.	59%	9%	32%
18. I am encouraged to explore creative ways to resolve permitting service delivery issues.	41%	14%	45%

Overall, employees had positive perceptions of their fellow employees, their work efforts, and knew their assigned duties. Many employees felt there was room to grow within the organization and they worked within a professional environment. Employees felt that their ideas were not valued when it came to the permitting process.

- An overwhelming majority (91%) of employees felt they knew what is expected of them, while 77% felt that their job was important, and that 95% felt that their colleagues were committed to quality work. Also, 91% of employees felt empowered to act within their area of expertise.
- 86% of employees felt that they had opportunities to learn and grow, and 82% felt that a coworker encourages professional development, and that there is good teamwork and communication between divisions/departments.
- 59% of employees felt that managers/supervisors focused on correcting the mistake with a learning approach versus placing the blame. Only 64% of employees felt that managers in their department was receptive to new ideas and suggestions for improvements in the permitting process.
- Only 41% of employees felt they were encouraged to question the review process, and 23% felt that the Town encouraged them to take practical risk-taking and supports positive efforts in improving the development review and permitting process. A majority (73%) felt that everyone is encouraged to solve problems together regarding the plan review and permitting process, but only 41% felt encouraged to explore creative ways to resolve permitting services delivery issues.

### **3. WORKLOAD**

Employees were asked to choose a selection that best reflected their current workload. The following chart shows the distribution of the responses:

Statement	Response
I am always busy and can never catch up.	46%
I am often busy but can generally keep up.	32%
I have the right balance of work and time available.	23%
I could easily handle more work given the available time.	0%

Almost half (46%) of the respondents felt that they were always busy and difficult to keep up with current assignments. 32% of the employees felt that they were often

busy, but could generally keep up with the demands of current workload. While 23% felt that they had the right balance of workload, and zero employees felt they could easily handle additional work assignments.

#### **4. OPEN ENDED QUESTIONS.**

To conclude the survey, we asked employees a series of open-ended questions to enable them to provide additional input and feedback to the project team. The responses to the questions were grouped and summarized by the project team.

##### **1. What do you think the Town does well in the development review and permitting process?**

For those who chose to respond to the open-ended statements, the number one positive attribute listed for the Department was respect for the hard work ethic of other employees. Some of the common themes are summarized below:

- Staff has a positive attitude to provide customer service to applicants through pre-application meetings, and frequent communication throughout the review process.
- Staff also felt that they provided review in a timely manner and were able to meet deadlines in an acceptable fashion.
- There was a positive working relationship between all departments and divisions in the development review process.

Most respondents felt they the Town had a strong working relationship with developers and each other. These open-ended responses are consistent with the multiple choice responses noted in the previous sections.

##### **2. What do you think the Town could do to improve the quality of development review and permit applications that are submitted?**

Several themes emerged from the responses to this statement. The main themes were categorized as:

- Provide a more streamlined approach to the submittal and review process and rely more on fillable forms, online tracking, and leveraging more technology.
- Staff desired to increase the quality and accuracy, and thoroughness of application materials, by providing more resources online and pre-application meetings.
- Also, staff desired to have more input from outside departments during the pre-application and review process.
- Staff would like to see the development permitting process more streamlined.

The majority of themes associated with these responses include increasing the reliance on technology, and to continue to improve interactions amongst Town staff and the development community.

**3. What do you think the Town could do to better communicate with applicants regarding the status of their permits while under review, including any comments or revisions that need to be made?**

The overarching theme in the responses was the integrated use of technology, particularly online status tracking so that the applicant can track their projects. Main themes from responses include:

- Allow for online submittal and real-time tracking of projects, including review and inspection processes. Interactive website.
- Continue to provide all review comments at one time, to avoid piece-meal comments.

**4. What do you think the Town could do to streamline the development review or permitting process?**

Many of the responses to this question were similar to the previous question and centered around the continued increase in the use of technology in regard to online submittals and tracking. Also discussed was the use of third party plan reviewers and inspectors for larger scale projects. Many respondents would like to reduce the use of paper.

**5. Are there any permits or requirements that you feel do not add sufficient value to the process and should be eliminated entirely or combined with another permit or process?**

This question did not receive substantial feedback, except that the Town requires permits that are required by the Building Code, thus the requirement cannot be eliminated.

**6. What do you feel are the three most important changes that should be made in the development review/ permitting process or associated policies and procedures to improve service levels?**

While there were various answers to this question, as like previous questions the emphasis was on the increase use of technology in the review and permitting process.

Many of the themes were around the following topics:

- Online submittals and progress tracking.
- Fillable forms.
- Provide applicants with a process flow chart with timelines and reviewing staff information.
- Avoid enforcement overlays and conflicts.
- Increased communication between reviewers and other department staff.
- Provide training for all employees on review process.
- Provide an avenue to solicit input for improving processes and flows.

Many of the themes that were mentioned in the responses were echoed throughout the survey in the defined answer and open-ended portions of the survey.

Key issues raised in the narrative comments can be summarized as focusing on the following issues:

- **Software / Technology:** Employees indicated a level of dissatisfaction with the lack of online submittals and tracking of projects.
- **Customer Service:** Many areas related to areas focused on customer service and continuing to provide quality service by meeting with applicants before and during the review process and providing tools, so they understand the review and permitting process along with real-time updates.

The responses provided in the narrative question section, along with the responses to the specific questions, provided the project team with useful information and insight regarding employee perspectives on the development review process and internal operation practices.



## **D. Summary of Stakeholder Input**

As part of the Matrix Consulting Group's study of the development review and permitting function in Blacksburg, the project team conducted a survey to gauge the attitudes and perceptions of customers on a variety of issues affecting the department. This report summarizes the results of the survey.

### **1. INTRODUCTION**

The survey was divided into two sections. The first section asked respondents to provide information about the nature of their interactions with the Blacksburg development review and permitting function. The second section asked them to respond to several questions about their satisfaction with various aspects of the development review and permitting process during those interactions.

The survey was distributed online via email and website link during March and April. Invitations for the survey were sent via email and posted on the Town's website. A total of 124 responses were collected.

### **2. RESPONDENT DEMOGRAPHICS**

While responses to the survey were confidential, the project team did ask respondents to provide some demographic information about themselves for data analysis purposes. The tables below outline the responses of survey participants to these questions.

What is your role in interacting with Blacksburg regarding development review and permitting?	
Architect	4%
Business Owner	18%
Contractor (Specialty)	7%
Developer	9%
Engineer	5%
General Contractor	12%
Homeowner	32%
Other	13%

How frequently do you interact with the Town of Blacksburg development review and permitting process?	
Several times per month	12%
Several times per year	34%
Once or twice per year	54%

How recent was your last interaction with the Town of Blacksburg development review and permitting process?	
Over a year ago	21%
6-12 months ago	21%
Within the last 6 months	59%

In what development review and permitting functions*, do you primarily interact with the Town of Blacksburg?	
Building and Site Inspections	56%
Building Permits	66%
Engineering approvals	32%
Plan Reviews	51%
Other (please specify)	15%

\* respondents could select all that apply

The responses shown in these tables provide background knowledge of the survey's participants and the nature of their interactions within the development review and permitting function in the Town of Blacksburg. It should be noted that approximately 95% of the non-homeowners respondents conduct business only in the Blacksburg and surrounding region. In the following section, this information has been used to conduct detailed analysis of survey responses.

### **3. MULTIPLE CHOICE QUESTIONS**

The second section of the survey asked respondents to indicate their level of agreement or disagreement within the site plan review process, building permit process, building inspection process, and engineering site inspection process respectively. The response options were “strongly agree”, “agree”, “neutral”, “disagree”, and “strongly disagree”. Respondents could also choose “N/A”. For discussion purposes, “strongly agree” and “agree” have been grouped in the tables, as have “disagree” and “strongly disagree”.

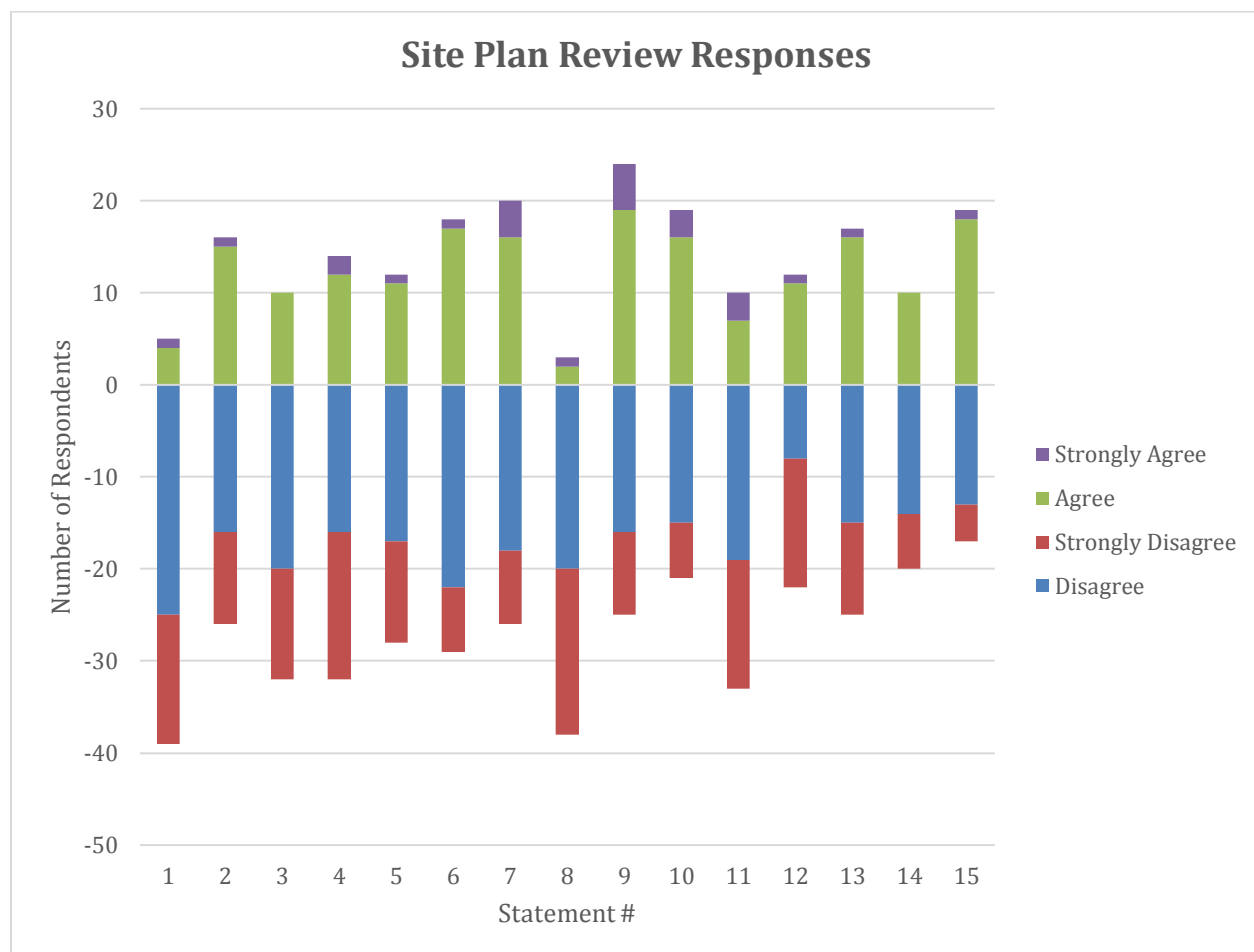
#### **(1) Site Plan Review Process**

Overall, the respondents to the site plan review related processes disagreed with the statements that were presented. The statements in the table below addressed the respondent’s attitudes to the site plan review process.

<b>Statement</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>N/A</b>
1. The planning approval process is predictable and customer-friendly.	7.1%	20.0%	55.7%	17.1%
2. For my plan submittal, I clearly understood the Town's submittal and design requirements.	22.9%	12.9%	37.1%	27.1%
3. While my project was under review, I received prompt communication regarding the project status.	14.5%	14.5%	46.4%	24.6%
4. Planning staff deal with me using a positive approach of "here's how to get your application approved", rather than a punitive approach of "you can't do it that way".	20.6%	10.3%	47.1%	22.1%
5. Engineering staff deal with me using a positive approach of "here's how to get your application approved", rather than a punitive approach of "you can't do it that way".	17.6%	16.2%	41.2%	25.0%
6. Staff clearly communicated to me the time required to process my application.	26.5%	7.4%	42.6%	23.5%
7. The Town meets its time commitments for processing my application.	29.0%	10.1%	37.7%	23.2%
8. After I submit my plans, the initial review and analysis of my application is complete and accurate; future problems do not surface that should have been caught during the initial review.	4.4%	13.2%	55.9%	26.5%

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Statement	Agree	Neutral	Disagree	N/A
9. Planning staff are readily accessible when I need help or an explanation regarding an application.	35.3%	8.8%	36.8%	19.1%
10. Engineering staff are readily accessible when I need help or an explanation regarding an application.	27.9%	16.2%	30.9%	25.0%
11. The amount of time taken to review and approve an application is acceptable.	14.9%	17.9%	49.3%	17.9%
12. Staff are consistent in applying the Town's land development regulations to my application and plans.	17.6%	26.5%	32.4%	23.5%
13. I am able to find necessary information regarding development standards and permitting requirements online.	25.0%	19.1%	36.8%	19.1%
14. The comments received from plan reviews are based upon adopted regulations or codes.	14.9%	35.8%	29.9%	19.4%
15. The fees charged for planning applications are reasonable.	28.8%	25.8%	25.8%	19.7%



- Overall, feedback was generally negative for these statements – the combined disagree and strongly disagree responses for each statement in the section was equal to or great than most agree and strongly agree statements. Neutral or N/A responses also had a significant number of responses.
- For architects, engineers, and developers who responded to this section, they felt that staff was easily accessible (66%), and that they knew what was required for a submittal (54%). Only 35% of this subsection of respondents felt that staff had a positive “here is how to get your application approved” approach. 55% of respondents felt that staff stated a timeline for the review process.
- For all other user groups (excluding architects, engineers, and developers) the majority of the responses were generally split between strongly disagree/disagree and neutral/NA responses.

Survey participants who have more frequent and recent experience with obtaining site plan approvals felt they knew what was required for submittal and that staff was easily accessible. Participants who are less likely to participant in site plan review on a regular basis, generally disagreed with many of the statements that were presented and that they did not know the submittal requirements, that staff was not available, and that the review time was not acceptable.

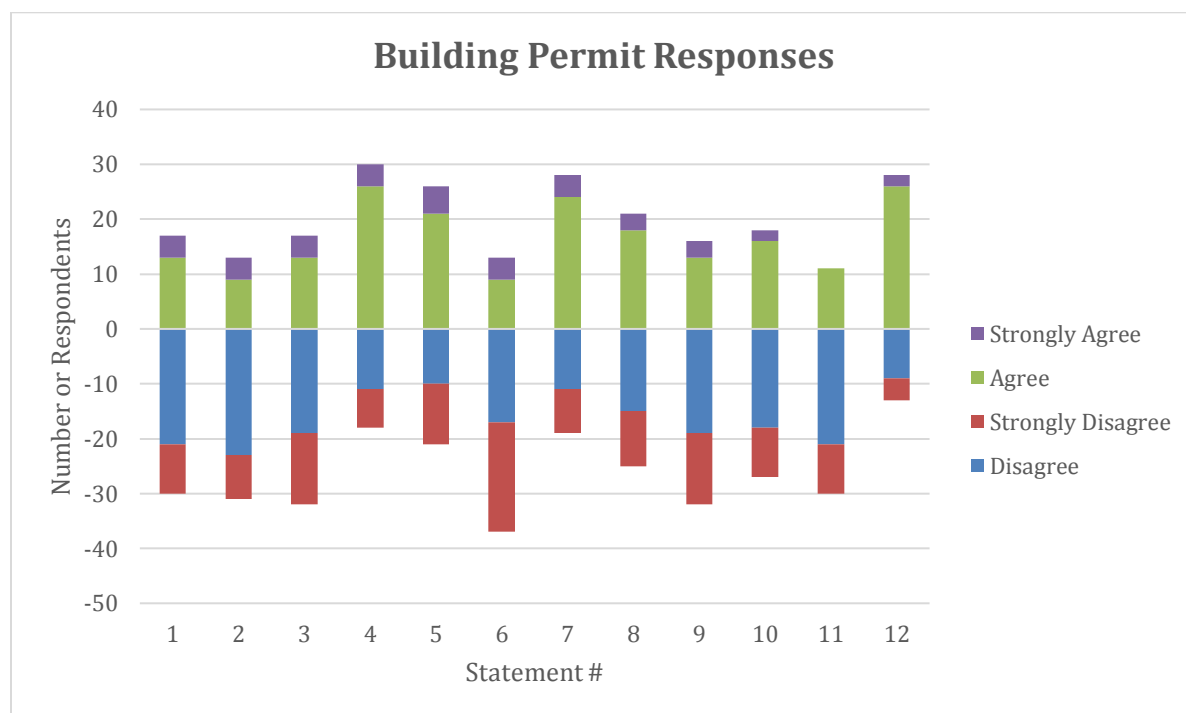
**(2) Building Permitting Process**

As with the site plan review process, respondents were asked to evaluate statements in regard to the Building Permitting Process. Responses were varied across the categories, with no statement receiving more than a 50% response in the “agree” category. The statements in the table below addressed the respondent’s attitudes to the building permitting process.

Statement	Agree	Neutral	Disagree	N/A
1. The building permit approval process is predictable and customer-friendly.	25.8%	22.7%	45.5%	6.1%
2. While my permit application is under review, I receive prompt communication regarding the project status.	19.4%	20.9%	46.3%	13.4%

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Statement	Agree	Neutral	Disagree	N/A
3. Building plan reviewers deal with me using a positive approach of "here's how to get your application approved", rather than a punitive approach of "you can't do it that way".	25.0%	17.6%	47.1%	10.3%
4. Staff clearly communicate to me the time required to process my application.	44.8%	16.4%	26.9%	11.9%
5. The Town meets its commitments for processing time of applications.	38.8%	19.4%	31.3%	10.4%
6. After I submit my permit application, the initial review and analysis of is complete and accurate; future problems do not surface that should have been caught during the initial review.	19.4%	14.9%	55.2%	10.4%
7. Staff are readily accessible when I need help or an explanation regarding an application.	41.8%	19.4%	28.4%	10.4%
8. The amount of time taken to review and approve an application is acceptable.	31.3%	22.4%	37.3%	9.0%
9. Staff are consistent in applying the Building Code to my application and plans.	23.9%	17.9%	47.8%	10.4%
10. I am able to find necessary information regarding development standards and permitting requirements online.	26.9%	23.9%	40.3%	9.0%
11. I am kept aware of the status of my application / permit during the review process.	16.4%	26.9%	44.8%	11.9%
12. The fees charged for building permit applications are reasonable.	43.1%	26.2%	20.0%	10.8%



- The statement that respondents agreed with the most (45%) was that staff clearly communicated the time for review, and 39% respondents agree that the Town meets its processing time commitments.
- The majority (9 of 12 statements) range in the 35-55% range of disagreeing with the statements presented. Of the respondents 24-37% of the responses were classified as Neutral or N/A.
- As with the site plan review responses, architects, engineers, and developers who responded to this section, generally felt that staff was easily accessible and that review timelines were met. A fair number of respondents (30-45%) had neutral responses to this set of questions.
- General contractors and trade contractor's responses were generally spread across all response categories. 64% of this subsections indicated they interact with the department one or two times per year.

As with the previous section, responses were across the spectrum of responses.

The highest percentage of respondent that agreed to any one statement was 45%, while 7 of 12 statements had 40-55% response in the disagree category.

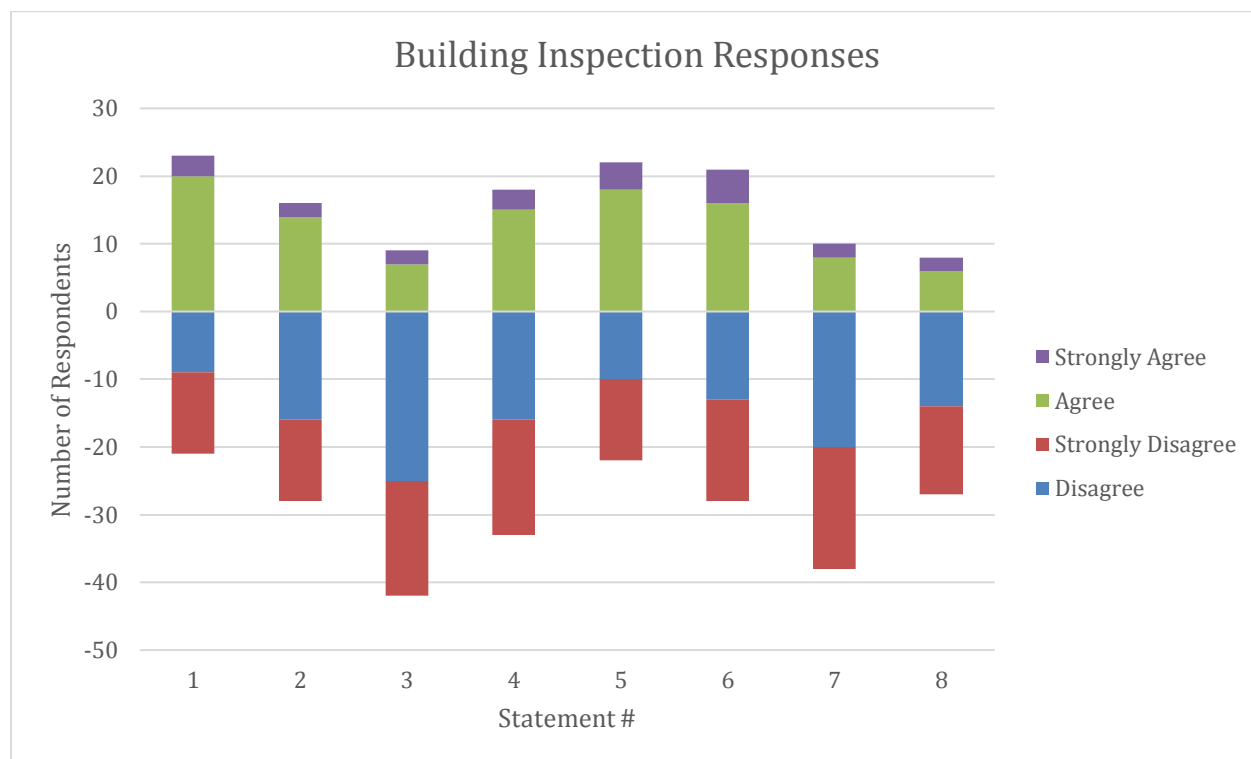
### **(3) Building Inspection Process**

Respondents were asked to evaluate statements in regard to the Building Inspection process in Blacksburg. While responses were varied with this set of statements, several statements resulted in strong disagreement. The statements in the table below addressed the respondent's attitudes to the building inspection process.

Statement	Agree	Neutral	Disagree	N/A
1. The Town does a good job at communicating what inspections are required.	34.8%	24.2%	31.8%	9.1%
2. The Town does a good job at communicating the building code requirements associated with construction.	24.2%	24.2%	42.4%	9.1%
3. Building inspectors deal with me using a positive approach of "here's how to get your work approved", rather than a punitive approach of "you can't do it that way".	13.6%	13.6%	63.6%	9.1%

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Statement	Agree	Neutral	Disagree	N/A
4. If deficiencies are identified during an inspection, staff are clear about what needs to be done to rectify the situation.	27.3%	13.6%	50.0%	9.1%
5. The inspections scheduling process is straightforward.	33.3%	22.7%	33.3%	10.6%
6. The timeframe for obtaining an inspection is reasonable.	31.3%	16.4%	41.8%	10.4%
7. Inspectors are consistent in applying the building code to my projects.	15.2%	19.7%	57.6%	7.6%
8. The process to obtain the final certificate of occupancy is understandable and efficient.	12.5%	29.7%	42.2%	15.6%



- 64% of respondents disagreed with the statement that “inspectors deal with me using a positive attitude”, and 50% disagreed that “if deficiencies exist during an inspection, it is clear how to rectify the situation.”
- 58% of respondents did not believe that inspectors were consistent in applying the building code to their project.
- An equal number of respondents agreed and disagreed about the inspection scheduling process being straightforward. When evaluating the responses from individuals who conducts business more than a few times a year in Blacksburg,



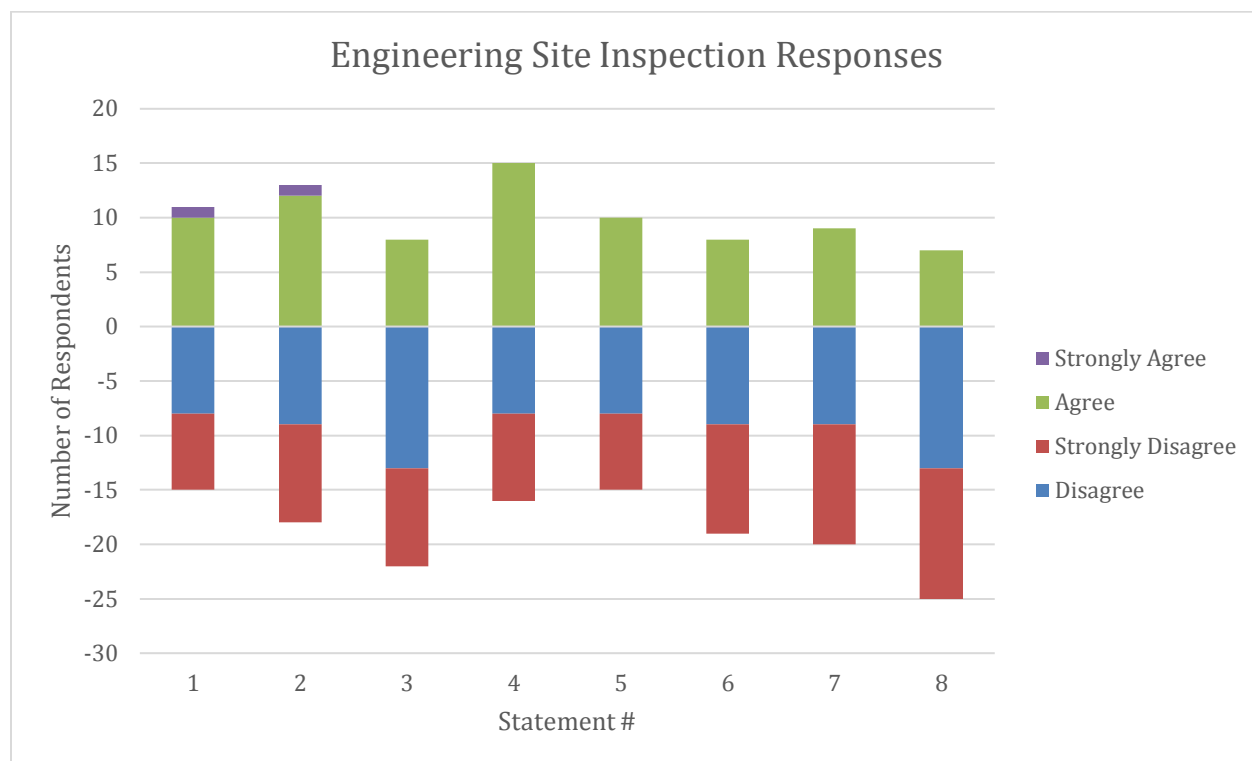
the response rate was slightly higher (7% higher) that they agreed the inspection scheduling process was straightforward.

For the building inspection process, the “strongly disagree and disagree” options received the highest percentage of the responses 75% of the time. The only statement that had “strongly agree or agree” as the highest number of responses was the Town does a good job at communicating what inspections are required.

#### **(4) Engineering Site Inspection Process**

Respondents were asked to evaluate statements in regard to the Engineering Site Inspection process in Blacksburg. While responses were varied with this set of statements, several statements resulted in strong disagreement. The statements in the table below addressed the respondent’s attitudes to the building inspection process.

Statement	Agree	Neutral	Disagree	N/A
1. The Town does a good job at communicating what inspections are required.	16.9%	30.8%	23.1%	29.2%
2. The Town does a good job at communicating erosion and sedimentation control and other land disturbance requirements associated with construction.	20.0%	23.1%	27.7%	29.2%
3. Engineering site inspectors deal with me using a positive approach of "here's how to get your work approved", rather than a punitive approach of "you can't do it that way".	12.3%	23.1%	33.8%	30.8%
4. If deficiencies are identified during an inspection, staff are clear about what needs to be done to rectify the situation.	23.4%	21.9%	25.0%	29.7%
5. The inspections scheduling process is straightforward.	15.4%	30.8%	23.1%	30.8%
6. The timeframe for obtaining an inspection is reasonable.	12.5%	29.7%	29.7%	28.1%
7. Inspectors are consistent in applying regulations related to stormwater, erosion and sedimentation control to my projects.	13.8%	24.6%	30.8%	30.8%
8. The process for site improvements to obtain the final certificate of occupancy is understandable and efficient.	10.8%	20.0%	38.5%	30.8%



- Of the 8 statements presented in this section, the highest percentage in the “agree” category was 23% for the statement that discussed “if deficiencies are identified during an inspection, staff are clear about what needs to done to rectify the situation”
- Statement 8 received the highest percentage of respondents in the “disagree” category at 39%.
- All statements had a greater response rate for the strongly disagree or disagree categories, with a fair number of responses for “neutral”.
- Analyzing the subsection of engineers, developers, and contractors, these responses were slightly higher in the “agree” category than “disagree.” This subsection, felt the town communicated the required inspections, erosion and sediment requirements, and inspection scheduling was easier to follow and understand versus all respondents.

The graph shows that only two respondents “strongly agree” with any of the statements. The majority of the respondents either “strongly disagree” or “disagree” with each statement. For all statements, over 50% of the respondents selected “neutral” or “N/A.”

## **(5) Benchmarking Analysis**

Respondents were asked to rate their experiences in regard to the development review and permitting process as compared to other jurisdictions where they have completed business. Approximately 50% of the respondents answer this question and 80% believed that Blacksburg was more difficult.

<b>Statement</b>	<b>Response</b>
Easier than in other municipalities.	5.0%
About the same as other municipalities.	15.0%
More difficult than other municipalities.	80.0%

Respondents were asked to provide other communities they have conducted similar business with. The communities that the respondents had worked in including most communities in Montgomery and Roanoke Counties. Other jurisdictions included Charlottesville, Pulaski County, and Raleigh/Durham, NC.

## **4. OPEN ENDED QUESTIONS**

Respondents were asked three open-ended questions to provide their feedback. These questions included the Town's strengths and weaknesses in the development review and permitting processes along with an opportunity to express any other thoughts they may have.

### **(1) Town Strengths**

Respondents were asked what they believed were the three greatest strengths of the Town of Blacksburg development review and permitting process. The following themes were most prevalent in the responses:

- Safety is top priority.
- Customer service including the availability of the staff.
- Meeting established timelines for review.

- Staff is knowledgeable.

Responses were consistent with the previous multiple choice questions and that respondents feel that staff is readily accessible and they are knowledgeable in their trades.

## **(2) Areas of Improvement**

Respondents were also asked what they believe the three areas that needed improvement the most for the development review and permitting process. The following themes were referenced the most:

- Increase use of technology: online submittal of permits, including fillable forms, mobile devices for employees (tablets, cell phones).
- Reduce review times, including resubmittal review times.
- Empower staff to make decisions.
- Consistency from staff and Town Council.
- Reduction of “late hits” on plan/building reviews and inspections
- Staff attitudes toward the customer.

These responses were consistent with the multiple choice answers and provide insight to the respondent’s view of the development review and permitting process. The themes revolved around the increased use of technology, with a more streamlined approach and review time periods and empowering staff to make decisions and to have more administrative approvals, and to be more consistent in the review and inspections processes.

## **5. CONCLUSION**

The response to the survey was solid with 124 individuals providing input, a number of consistent themes emerged from the participant's responses:

- Customers generally believe that staff is available before and during the review and inspections process. Customers noted that most staff members were the strength of the department.
- Customers felt that even though that staff was available approximately half of the respondents did not feel they knew all the steps for approval. Respondents felt that staff, while friendly did not approach deficiencies in the review and inspection process with solution based approaches.
- Respondents felt that the Town should rely more heavily on technology and that the timeline for development review and inspection scheduling was too long.
- Survey participants generally believe that the standards applied are fair, but struggle with the "late hits" and inconsistency of the review and inspection process. They also have concern with the influence that Town Council has in the decision making process and the consistency of decisions.