

# Preventing Future Back-logs in Building Permit Review and Processing

Summer Study 17-014
Development Services Department
August 7, 2017



# Summer Studies

Preventing Future Back-logs in Building Permit Review and Processing

#### Executive Summary

A back-log of building permit applications grew to unacceptable levels during the first half of FY 2016/2017. Insufficient staff resources lead to a bottleneck in plan review for building code and structural compliance. The result was prolonged reviews and an unacceptable level of service. Less-than-adequate staff resources performing zoning reviews also contributed to the delays. The backlog was eliminated by adding staff resources in these two areas. This Summer Study examines the challenges that were identified and explains how they were addressed. It concludes with the organizational and budgetary actions proposed to prevent the problem from recurring while recognizing that several new development projects are getting underway.

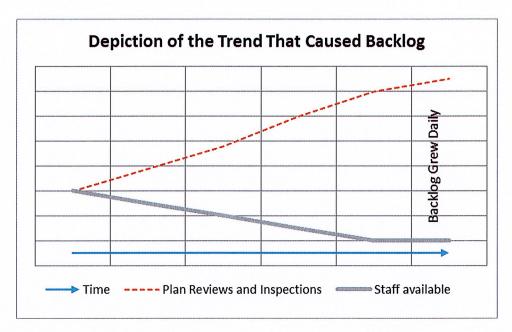
#### Challenge

At a time when the City needed additional staff resources to

accommodate an increasing level of permit activity, the departure of staff members in zoning and in the structural trade hastened an accumulation of unprocessed applications. The staff departures combined with the number unprecedented of applications and difficulties in securing qualified replacement

"...difficulties in securing qualified replacement professionals resulted in turn-around times that approached **two months**."

professionals -- resulted in turn-around times that approached two months. For example, at one point the City had just one licensed structural reviewer available, and instead of reviewing plans he was performing inspections to avoid delaying the numerous projects under construction in the City. Review of new plans nearly came to a halt.



#### Solution

The elimination of the backlog began on Monday, May 22, 2017 when a plan examiner and two building inspectors, provided by Calvin Giordano Associates (CGA), began assisting the Building Division while two zoning technicians, provided by CAP Government, Inc., began assisting the Zoning Division.

Added Resources from Contract Service Providers 5/22/2017

Building Plans Examiner	Completed an avg. 8 plans/day
Structural Inspector	12-16 Inspections/day
Structural Inspector	Supplement in Plan Review and Inspections
Zoning Technician	Completed an avg. 8 plans/day
Zoning Technician	Eliminated after 3 weeks – backlog finished

July 2017

With these added resources, the backlog began to dwindle immediately and was eliminated in less than a month.

In addition to the outside providers' delivery of staff resources, the Department had also: 1) begun advertising to fill the vacant Building Official position; 2) filled a vacant Permit Clerk position; 3) set varying timeframe standards for three types of applications — small, standard, and extensive; 4) made modifications to the walk-thru permitting process; 5) refined the prioritization process for review of resubmittals; 6) initiated updates to the standards, guidance, and training that will be provided to plan reviewers; and 7) adjusted the assignments in the Planning and Zoning Division as necessary to overcome the departure of both the Division Manager and the divisions' contractual/part-time zoning technician. Each of these actions was described in more detail in CM memo 17-078, on June 6, 2017. A copy is attached as Exhibit 1.

While the actions described in the previous paragraph slightly improved efficiency, no significant gains were made in eliminating the backlog until the additional staff resources began to perform the necessary reviews. Therefore, the main objectives of this study are to set forth the proposed method for securing the staff resources that will be needed on an ongoing basis to prevent future backlogs and to project the fiscal impact of doing so.

"...the main objectives of this study ... to **prevent future** backlogs and to project the fiscal impact..."

#### Economics and Relationship to Millage Set on June 21, 2017

The delivery of staff resources from private providers was accomplished by "piggy-back" procurements via the City of Fort Lauderdale's contract with the two providers mentioned for the provision of supplemental plan review and inspection services.

The hourly rates for the professionals provided have been as follow:

#### **Hourly rates for Contract Service Providers**

Building Plans Examiners	Range from \$80 to \$110 per hour
2 Structural Inspectors	Range from \$80 to \$90 per hour
2 Zoning Technicians	Range from \$65 to \$75 per hour

Using blended averages and a 40-hour work week, the cost for the outside services used since the backlog elimination began has been \$15,800 per week (\$325/hour x 40 hours).

Considering Building Division positions that were vacant during FY 17, and after utilizing the salary saving from those vacancies to cover the costs of outside providers, the elimination of the backlog increased the City's weekly cost of providing these services by \$7,800. The need for a zoning technician via a private provider has been eliminated by reclassifying the Planning and Zoning Manager position with an in-house Zoning Technician. Thus, after shifting the FY 2017/2018 salary budget for a structural plans examiner to the outside services account, the ongoing cost to maintain the level of service would be an additional \$5,680 at the current level of activity. Projecting a continued moderate increase in that level of activity a 20% contingency is added to that projection. The Gulfstream Point, Optima, Village II, Icebox, and 2000 S. Ocean projects are just a few of the larger projects that could get under way. (See Exhibit 2) The proposed FY 2017/2018 budget was balanced in part via the elimination of \$633,000 in outside services funding in the Building

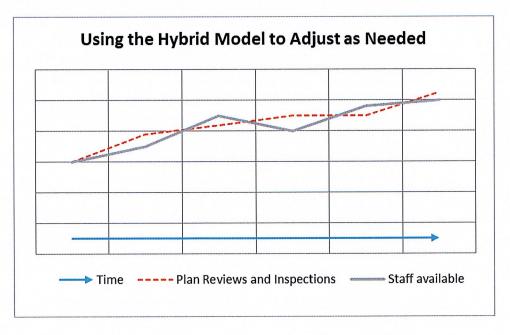
Division's proposed budget. Based upon the projection above, it is recommended that \$354,000 of that be reinserted.

It is recommended that the City build upon its existing hybrid structure for the Building Division. The Department will maintain a core group of employees consisting of the following:

Building Official; Chiefs in each trade - Structural, Electrical, Plumbing, and Mechanical; and an inspector/plan reviewer in the two busiest trades - structural and electrical.

The Department will continue to supplement the core group above with plan reviewers and inspectors being provided by outside contractors. For at least the duration of FY 17/18 this will mean:

A structural plan reviewer and two structural inspectors. It will also include redundancy in the other three trades with supplemental staff being available for the Electrical, Plumbing and Mechanical trades to address exceptionally busy weeks, illnesses, and vacations.



Based on the average cost per week of \$6,816 for the level of service from the outside provider as described above, the projected cost for the year is \$354,000.

July 2017

The revenues generated by the Building Division have historically more than covered its costs. (See Exhibit 3) As listed in the proposed FY17/18 Budget, the projected revenue from the Building Division's operations equals \$4.17 million. The funding allocated in the proposed budget for operation of the Building Division was \$2.65 million. Thus, even with the increased allocation for outside services as suggested herein, it is anticipated that the revenues will exceed the cost of operating the division. To provide the revenues necessary to accommodate the increased outside services fees and keep the General Fund budget balanced, the base permit fee for commercial projects with a value of more than \$2,000,000 is proposed to increase from 1.0% to 1.15%. It is estimated that this fee increase will generate \$400,000 in additional revenue during FY 17/18, which is roughly the cost of maintaining the improved response times.

#### Action Item(s)

Securing the necessary funds for the outside services in FY 17/18 is the main action step to assure that the staffing level keeps pace with construction. The following actions and initiatives will continue the progress being made in the Building Division:

- A new Building Official has been selected and is scheduled to start in early September.
- A replacement user interface for accessing permitting information on-line will be rolled out in FY17/18. The current Citizen Access Portal (CAP) provided by Energov is being replaced with a portal called Citizen Self Service (CSS) which will be provided by their parent company, Tyler Technology. This upgrade will be provided at no cost to the City other than our staff time to implement the transition.
- If appropriate, given the shortage of building plan reviewer and inspection personnel in both government and the private sector the Development Services Department will coordinate

with Procurement to tailor an RFP specific to the supplemental services needed in the Building Division with the goal of securing an improved pricing structure. The Fort Lauderdale contracts (with Calvin Giordano and CAP Govt.) which the City uses to access these services provides "as needed" staff. Typically, if a City can guarantee a certain level of use for an extended period of time, the company providing the staff can do so at a less expensive rate. While Fort Lauderdale's contract anticipates an annual usage of up to \$2.5 million in services, it makes no promise for a minimum hours of work, and the City maintains contracts with more than one company in order to secure their estimated \$2.5 million worth of services in a tight job market. Exhibit 4 (Graphic showing Hallandale Beach's Plan Reviews in 2016) and Exhibit 5 (Graphic Showing Hallandale Beach's Inspections in 2016) demonstrate that the City has substantial need for these services, regardless of the amount of large new developments. Thus, the City may be able to guarantee a minimum number of hours, and may be able to award such a contract to a single vendor. These factors will be analyzed by the new Building Official, the Development Services Director, the Budget Office, and the City Manager's Office before proceeding with an RFP.

• Digital plan review. This significant advancement in how the Building Division receives and responds to permit applications will be a tremendous efficiency improvement.

Exhibit 1 – CM 17-078

Memo about Building Division Action Steps

Exhibit 2 – Revenues vs. Expenditures

FY 13-14 Actuals through FY 16/17 Projections

FY 18 Projection

# Exhibit 1

# CM 17-078

# Memo about Building Division Action Steps

#### CITY OF HALLANDALE BEACH

#### CM 17-085

GWante

DATE:

June 6, 2017

TO:

Mayor and City Commission

FROM:

Roger M. Carlton, City Manager

SUBJECT:

Permit Application Processing

This memo describes how the Development Services Department's recent actions are returning the review times in the Building Division to a level of service that is both responsive to the needs of the building industry and financially feasible. In May of 2017 the turn-around times continued to extend beyond what is acceptable. This memo also describes how the Department will continue achieving inspection scheduling at the industry standard of "next business day", which the majority of cities in Broward County also strive to maintain.

#### Background

The existing back-log of plans waiting to be reviewed was caused by the bottleneck in the building/structural trade. Numerous staff members with this specialty left employment with the City between October of 2106 and May of 2017. These departures -- combined with an unprecedented number of applications and difficulties in finding replacement building trade professionals -- resulted in turn-around times that approached two months. While the Department was recently successful in hiring a structural plans examiner, that employee had to be assigned to perform inspections instead of reviewing plans to avoid delaying the numerous projects under construction in the City. The most recent departure, the Building Official, further reduced the staff available to perform plan reviews and inspections.

#### Moving Ahead in Building/Structural Plan Review

Following are the specific steps the Department implemented to address the backlog:

- Since May 22, 2017 a plan examiner and two building inspectors provided by Calvin Giordano Associates (CGA) are assisting the Division. With these added resources, the backlog began to dwindle immediately. The goal is to eliminate the backlog by July 21. As of the writing of this memo, progress is ahead of that schedule.
- The Department has advertised to fill the Building Official position. The City must designate a permanent Building Official within 90 days of the prior designee's departure.

Date: June 6, 2017

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 The Division has completed interviews and made a selection to replace a recently vacated Permit Clerk position. Filling this position will allow for the processing of the backlog to occur at the same expedited pace as the plan review will be occurring.

 One additional clerk for the Division is proposed in FY '17-'18 so that timely responses to public records requests, 40-year recertifications, document scanning, phone and counter communications, concierge service and improved customer service can be achieved. Employees from a temporary staffing agency have been brought in to assist for the time being as the expedited pace in plan review has placed a greater workload on the permit clerks to also overcome the backlog.

In addition to the specific steps listed above, following are further improvement areas that will be implemented by the Department:

- Updating our procedures for plan revisions: adjustments are being made to our review standards in a way that continues to ensure public safety and quality work, while minimizing resubmittals and maintaining compliance with Broward County's Administrative Chapter 1 revisions to the Florida Building Code, which requires accurate plans for all permitted projects.
- Reinstatement of our concierge services in Fiscal Year 17/18 is proposed so
  that extensive projects are encouraged to utilize it instead of private providers:
  Having the adequate resources available to catch up on the backlog will allow
  senior staff in the Division to analyze and prepare such guidance for the plan
  reviewers and inspectors, and to schedule training sessions in order to
  implement an expedited review process with the intent of fewer resubmittals
  being required.
- Categorizing Applications: Most applications can be described as being within
  one of three types -- small, standard, or extensive. Small applications include
  single trade applications such as roofing, air conditioning, water heater changeouts, windows, shutters, driveways, etc. Standard applications are the
  broadest category. It includes residential and commercial renovations, one
  and two-family new construction, etc. Extensive applications include large
  scale renovations, new commercial construction, and high rise projects.
- As the backlog in building/structural reviews becomes manageable, the expected level of service by category will become an additional performance measure. Small applications requiring less than 30 minutes review and approvable on first round or second round are to be processed in 1 to 5 days per review. Standard applications requiring 1 or 2 hours of review and at least one, and, sometimes two or more corrective resubmittals are to be processed in 5 to 15 days per each time. Extensive applications, usually requiring up to

Date: June 6, 2017 Page No. 3

three hours of review and taking at least three, and often more, corrective resubmittals for review, are expected to be completed in 15 to 30 days each time.

- Further modifications to walk-thru permitting: The volume of applications seeking same day permitting for small jobs, at times began consuming all available staff to the point where no other applications were being reviewed. In order to continue accommodating the small jobs while still making progress on standard and extensive projects, walk-thru applications are currently being collected for "walk-thru" review and processing as a group one day each week. While this has provided substantial efficiency benefits internally, it is not sufficiently responsive to the industry. The frequency of walk-thru review will be increased as the backlog dwindles. Initially the frequency will be increased to two days each week, meaning the turn-around time on small applications would not exceed 3 work days. A return to same day or 1-day service is not anticipated while the level of permit activity in the standard and extensive categories remains high unless budgetary constraints are lifted to allow additional hiring. This is an issue for discussion during the upcoming budget workshop.
- Additional methods of prioritizing resubmittals: Currently, resubmittals are segregated from new applications and assigned higher priority. However, this skews toward greater emphasis on the standard and extensive projects as they tend to require more rounds of review. As the backlog dwindles and staff resources stabilize, a more focused prioritization method based on both category and submittal round will be implemented.

#### Moving Ahead in Zoning

In late 2016 and early 2017, there was a fast-growing backlog in completing the zoning reviews and inspections of permit applications. Zoning conducts inspections that range from verifying that a shed meets set-back requirements to ensuring that a new major development has installed the parking spaces and trees pursuant to plans. By temporarily re-assigning Planning Division staff members to review permit applications and perform inspections for zoning compliance, this was resolved. However, this practice delayed development review, transportation planning, policy analysis and preparation, and customer service at the counter. With the recent departure of the Planning and Zoning Division Manager and the departure of a contractual/part-time zoning technician, the backlog in Zoning's responsibilities with building permits became problematic once again. Following are specific steps implemented in this regard:

• As of May 22, 2017, two full-time zoning technicians are being provided by CAP Government, Inc. With these added resources, the backlog in zoning

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plan review and inspections was eliminated in 2 weeks. They are now assisting with the backlog of requests for zoning certification letters and public records requests.

• The vacant Planning and Zoning Division Manager position will be reevaluated. In its place, the Department is considering a full time zoning technician to assure the permitting backlog does not recur. In addition, the Department is considering – instead of filling the Planning and Zoning Division Manager position -- creating a Policy Analyst position to work on revisions to the City's land development regulations. This is necessary to manage the evolution of many aspects of the code as envisioned by the City Commission, for neighborhood studies, and as we continue to focus on redevelopment and the upgrading of specific neighborhoods throughout the City.

#### Inspections

The Department has placed a priority on fulfilling inspection requests in all trades, including building and zoning. This keeps construction projects moving. However, dedicating Building staff and Zoning staff to inspections added to the backlogs in plan review, unsafe structures, 40-year recertifications, phone calls, meetings and counter communications, concierge service, development review, transportation planning, policy analysis and customer service. The additional resources described above will allow inspections to occur without reducing service levels in the afore-mentioned areas.

#### Funding and Procurement

Funding for the additional resources added on May 22, 2017 is available via a combination of salary savings and the existing funds budgeted for outside services for the Building Division. The City has contracts and/or is renewing its contractual arrangements with Calvin Giordano Associates and CAP Government, Inc. Earlier in the year, the City Commission authorized the Department to utilize those companies' services via their respective contracts with the City of Fort Lauderdale. An analysis of the amount authorized versus the amount that will be needed is underway to determine if additional spending authority from the Commission will be needed prior to the end of FY 16/17. An analysis of the fiscal impacts of the more intense use of contract services as described herein on an ongoing basis has been drafted. Accordingly, recommendations therefrom are being included in the FY 17/18 Budget proposal.

#### Conclusion

A consistent effort to accommodate the substantial amount of building activity in the City has been underway for nearly a year. In the electrical, plumbing and mechanical

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trades this has been accomplished using a variety of methods to supplement staff resources; this includes overtime, part time staff, and supplemental staff from the contract service providers CGA and CAP. The Department's efforts in the building/structural trade -- and to a lesser extent in zoning -- have been ineffective for numerous reasons as explained above. Renewed relationships with Calvin Giordano Associates and CAP Government, Inc., and their respective commitments to providing the professionals needed to assist in these two trades, is allowing the Department to return to the high level of customer service the community expects and deserves.

A periodic report following the format below will be provided to the City Commission to demonstrate how the backlog reduction is working. It is important to recognize that the new permit applications are received each day — "backlog" data includes all applications in queue at the time of the report. The number reflects how many days it will take to get to the most recently submitted application.

Plan Review Backlog as of 06/5/17\* in Calendar Days

Trade	Re-Submittals		Progress since 5/22/17 initiation				
Building/Structural	11 days	19 days	Reduced by 14 days*				
Electrical	1 day	3 days	Appropriate				
Mechanical	1 day	1 day	Appropriate				
Plumbing	3 days	3 days	Appropriate				
Zoning	1 day	1 day	Reduced by 21 days*				

Timeframes in **bold** are beyond 15 days = unacceptable / use additional resources to resolve Timeframes in *italics* are beyond 7 days = monitor / supplemental resources may be needed \*Refers to backlog for new submittals

\* Update on tremendous progress this week: At the time of this memo's distribution on 6/9/17 the backlog in all trades has been eliminated. While more than 25 plans are pending review as of this addendum, they are all permit applications which were received during the last 3 days.

CC: Nydia Rafols, Deputy City Manager
Steve Parkinson, Assistant City Manager/Public Works Director
Jeremy Earle, Assistant City Manager
Greg Chavarria, Assistant City Manager
Keven R. Klopp, Director of Development Services
Mark Ellis, Fire Chief
Raul Alvarez, Acting Building Official
Christy Dominguez, Senior Planner
Carlos A. Penin, CAP Government, Inc.
Norm Bruhn, Calvin Giordano and Associates

### Exhibit 2

# Revenues vs. Expenditures

# FY 13-14 Actuals through FY 16/17 Projections

July 2017

04/14/2017 | City of Hallandale Beach

8363mgou | NEXT YEAR BUDGET HISTORICAL COMPARISON

PROJECTION: 20181 FY 2018 BUDGET PROJECTION

#### DEVELOPMENT SERVICES OPERATIONS REVENUE VS. EXPENDITURES FY 13-14 ACTUALS - FY 16-17 PROJECTION

	FY 13-14 ACTUALS			FY14-15 ACTUALS		FY15-16 ACTUALS		FY 16-17 BUDGET	FY 16-17 YTD - ACTUALS		FY 16-17 PROJECTION	
DEVELOPMENT SERVICES ADMIN	ISTRATIO	N (5010):										
EXPENSES	\$	208,913	\$	280,913	\$	300,511	\$	361,751	\$	212,898	\$	374,835
DEVELOPMENT SERVICES PLANNI	NG (5020	)):										
REVENUES	\$	790,657	\$	1,194,156	\$	1,158,779	\$	1,404,046	\$	822,736	\$	1,225,566
EXPENSES	\$	533,354	\$	551,358	\$	618,636	\$	893,566	\$	420,230	\$	816,859
NET REVENUE	\$	257,303	\$	642,798	\$	540,143	\$	510,480	\$	402,506	\$	408,707
DEVELOPMENT SERVICES BUILDIN	NG INSPE		٠.	2.011.000	,	2 005 020		4 (02 7(2		2 102 462		4 000 157
REVENUES	\$	2,512,818	\$	2,911,099	\$	2,805,928 1,613,887	\$	4,602,763 2,032,854		2,103,462 1,071,100	\$	4,099,157
EXPENSES NET REVENUE	\$	1,489,964 1,022,854	\$	1,481,835 1,429,264	\$	1,192,041	\$	2,569,909	\$	1,071,100	\$	2,000,542 2,098,615
DEVELOPMENT SERVICES CODE C	OMPLIAN	ICE (5050): *										
REVENUES	\$	375,214	\$	467,614	\$	772,672	\$	675,273	\$	108,828	\$	682,273
EXPENSES	\$	671,070	\$	694,988	\$	730,364	\$	792,741	\$	418,913	\$	792,544
NET REVENUE	\$	(295,856)	\$	(227,374)	\$	42,308	\$	(117,468)	\$	(310,085)	\$	(110,271)
DEVELOPMENT SERVICES COMBIN	NED OPEI	RATIONS:									-	
COMBINED REVENUES	\$	3,678,689	\$	4,572,869	\$	4,737,379	\$	6,682,082	\$	3,035,026	\$	6,006,996
COMBINED EXPENSES	\$	2,903,300	\$	3,009,094	\$	3,263,397	\$	4,080,912	\$	2,123,141	\$	3,984,780
NET EXCESS/(DEFICIT)	\$	775,389	\$	1,563,775	\$	1,473,982	\$	2,601,170	\$	911,885	\$	2,022,216

 $<sup>{\</sup>rm ^*Code\ Compliance\ receives\ "revenue"\ from\ the\ CRA\ for\ enhanced\ services\ within\ the\ CRA\ Area}$ 

# ${\bf Exhibit~3}$ Inspections Required to Meet New Demand ${\bf FY~18~Projection}$

	Inspections Required to Meet Demands (Exhibit E) Proposed FY2018 Budget												
Trade	Gulfstream Point 297 Units	2000 S Ocean 235,557	Domus Office Center 174,000 SF	Dream Team 1,900 SF	Peninsula 144, 400 SF	The state of the s				Insp/Workday (251 days/yr)			
Struc	1544	1338	989	11	818	143	80	5020	9943	4			
Elec	564	444	328	4	272	319	27	2259	4217	1			
Mech	119	143	105	2	87	102	9	753	1320				
Plbg	653	226	167	2	138	162	14	1506	2868	1			

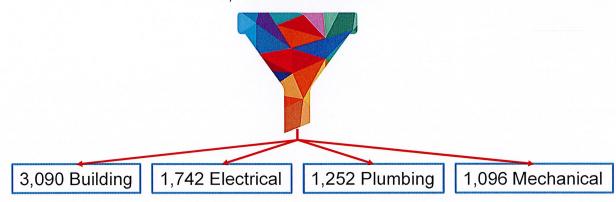
# Exhibit 4 Plan Reviews 2016



# **Process Improvement**

# Plan Reviews in 2016

7,180 Plan Reviews



#### Categorize Application Types

Small (Windows, water heater, roofing, shutters, driveway...) = 26% Medium (Condo Remodeling, commercial alterations...) = 74% Large (New Construction buildings, high-rises) = <1%

# Exhibit 5 Inspections 2016

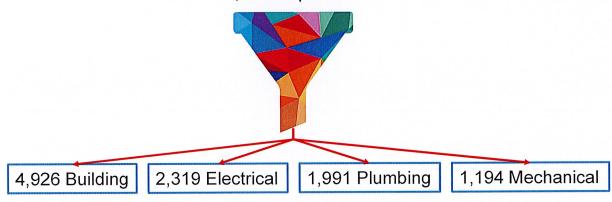
July 2017



# **Process Improvement**

# **Inspections 2016**

10,430 Inspections



Current Inspector Resources Capacity Limit Management

Building: 1.0 FTE -- 20 Inspections/day Electrical: 0.5 FTE -- 10 Inspections/day Plumbing: 0.5 FTE -- 10 Inspections/day Mechanical: 0.5 FTE -- 10 Inspections/day