

XI. RESIDENTIAL PLAN REVIEW

A. PROFILE

The Residential Plan Review Division reviews residential permit applications and plans for compliance with single-family and two-family zoning and technical regulations. Residential Permit Applications are required for all new residential construction, additions, and/or interior remodels of single-family residences, two family residences, accessory buildings and duplexes on a single lot. Plan reviews typically includes confirming that the proposed structure does not exceed the maximum allowable lot coverage specified in the Land Development Code and easement and set-back requirements established through the subdivision approval process. These plans also undergo a review by technical plans examiners to confirm they comply with the appropriate technical requirements of the adopted International Residential Building Code.

Staff assigned to this section includes intake staff, zoning reviewers and technical code reviewers. The intake staff performs a completeness check to confirm the plans have adequate information to warrant a formal plan review. If accepted, the intake staff routes the plans to the technical code and zoning review staff to confirm the project complies with zoning and neighborhood plan requirements applicable for the location of the proposed project. Based on the location of the proposed property, intake staff may need to also route the plans to other staff for review including flood control and historical preservation reviewers.

For many years the Residential Plan Review process did not include any review for compliance with the technical building, plumbing, mechanical and electrical codes. Inspectors in the field performed any plan review that was being conducted as the structure was being built. The Residential Plan Review group is making strides to expand the level of technical plan review being performed, but the current level is substantially less than that performed by other jurisdictions comparable to Austin in size and complexity. The current practice still does not include a thorough technical review of plans stamped by a Professional Engineer or Licensed Architect.

In addition to requiring projects to comply with the conventional building and zoning code requirements, some projects to be built in certain areas must also comply with additional requirements intended to limit the bulk and volume of the residential structures. These additional requirements are referred to as the “McMansion” standards. Reviewing and approving plans that conform to these additional standards has become very challenging for staff because these approvals frequently resulted in complaints from adjacent neighbors while the structure is under construction. Many feel the requirements are difficult to understand and therefore lend themselves to a variety of potential interpretations.

Other services offered by the Residential Review staff include:

- Volume Builder Program that is offered to expedite review if the volume builder is willing to assume additional responsibility for confirming the plan layout meets zoning and subdivision requirements,
- Expedited review for projects that meet the SMART Housing criteria as an incentive to promote the construction of residential structures that are sustainable, incorporates visitability standards and are prices to allow low and moderate income families to become residents of Austin;
- “Express Review” program that allows qualifying small projects to be reviewed and permitted in a single day; and
- Residential Plan Review Staff also are available to walk-in customer who have general questions or by appointment to address project specific inquiries.

The Residential Review staff offices are located on the second floor of One Texas Center and are considered part of the One-Stop-Shop. One of the advantages of this location is that they share this floor with the Commercial Plans Examiners and Fire Department Plans Examiners. We believe co-location of related services is a key component to establishing good communication between working groups.

As stated previously under the Permit Center heading, the Residential Plan Review group is also experiencing unacceptable customer wait times. We generally recommend wait times do not exceed 15 minutes for 90% of the customers. The current wait times the Residential Plan review group to serve 90% of its customers is **1 hour and 3 minutes**.

It is also relevant to note that the performance of the Residential Plan Review group became the subject of significant negative press coverage approximately 18 months ago when the media published the fact that the residential plan review functions had a six (6) month backlog, Management implemented an emergency plan to reduce the backlog by temporarily reassigning staff from other department to reduce the backlog. Staff interviews suggest that the group’s performance is again slipping towards accumulating a significant backlog because management has not implemented any fundamental changes.

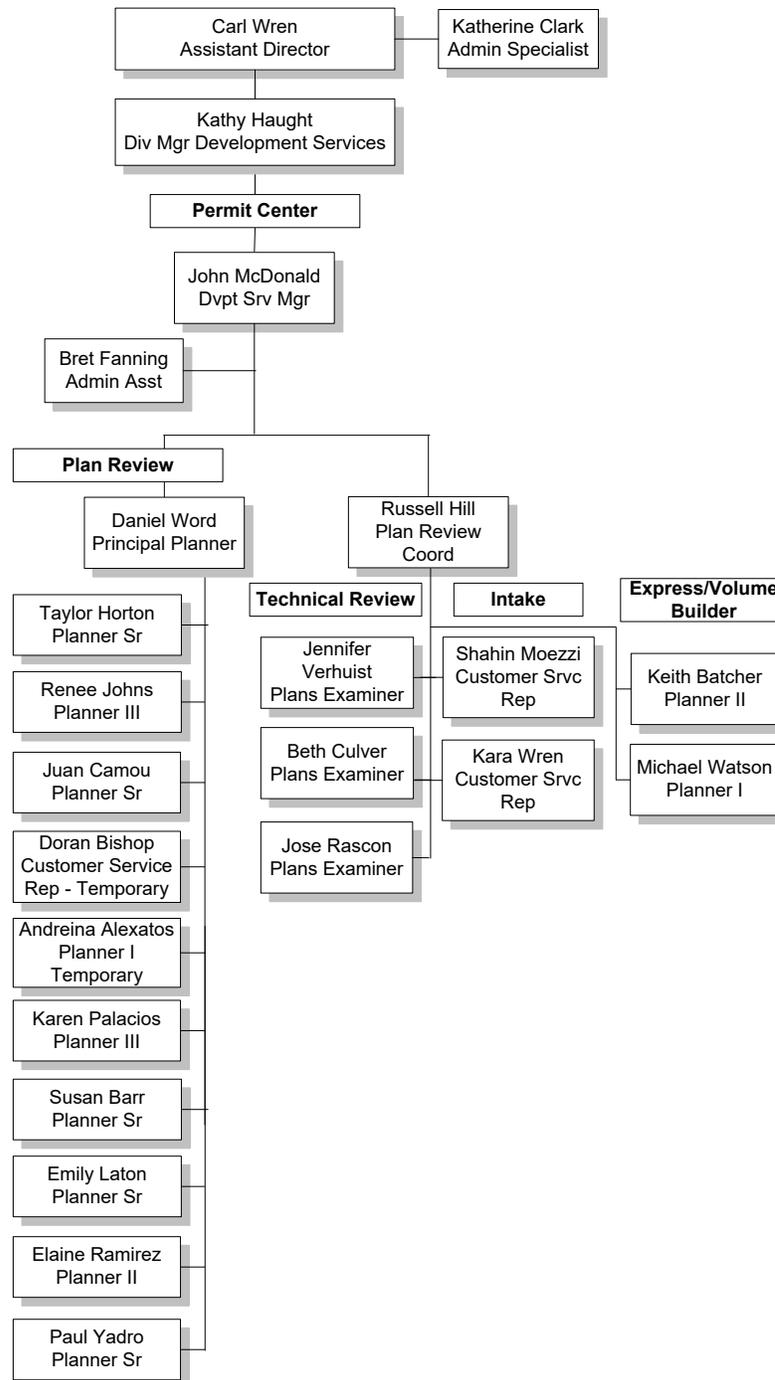
Authority

The Residential Plan Review staff enforces the provisions found in Chapters 25-1 thru 25-13 of the City’s adopted Land Development Code. Chapter 25-12 specifically adopted the International Residential Code with local amendments as the technical codes to be applied in Austin. A more comprehensive list of adopted codes can be found under the Commercial Inspection portion of this report.

Organization

The organization of the Residential Review is shown in Figure 37. Staff positions and functions are shown in Table 61. These may not match the current staffing but were accurate at the time we did our research.

Figure 37
Organization of Residential Review



Staffing

**Table 61
Staffing and Functions in Residential Review and Permit Center Division**

Position Title	Number of Positions	Responsibilities	Reports To
Assistant Director and Building Official (CBO)	1	Manages Building Inspection, Commercial Building Review, Permit Center, Residential Review, and Site/Subdivision Inspections	Director
Div Mgr, Development Services	1	Manages Residential Review, Commercial Review, and Permit Center	Assistant Director
Residential Review			
Dvpt Srv Mgr	1	Manager for Planning review, Technical Building review, Residential Plan Intake and Express/Volume Builder programs	Div Mgr, Development Services
Admin Asst	1	Provides administrative support to Residential Plan Review Section	ServicesDvpt Srv Mgr
Plan Review			
Principal Planner	1	Supervises staff performing planning and zoning reviews	Dvpt Srv Mgr
Planner Senior	5	Performs more complex reviews to confirm compliance with zoning requirements including adopted neighborhood plans	Principal Planner
Planner III	2	Performs complex reviews to confirm compliance with zoning requirements including adopted neighborhood plans	Principal Planner
Planner II	1	Performs basic reviews to confirm compliance with with zoning requirements including adopted neighborhood plans	Principal Planner
Customer Service Rep, temporary	1	Assists staff in performing zoning reviews and performing administrative tasks. (Temporary position)	Principal Planner
Planner I, temporary	1	Performs basic plan reviews to confirm compliance with zoning and adopted neighborhood plans. (Temporary Position)	Principal Planner
Plan Review Coordinator	1	Supervises staff performing Technical Building Code Plan Reviews, intake staff, and staff who process Express/volume Builder submittals	Dvpt Srv Mgr
Technical Review			
Plans Examiner	3	Performs Technical Plan Reviews to confirm compliance with International building Code and local amendments	

Position Title	Number of Positions	Responsibilities	Reports To
Intake			
Customer Srvc Rep	2	Receive residential plans, perform completeness checks and route plans to appropriate reviewers.	
Express/Volume Builder			
Planner II	1	Reviews Express/Volume Builder permit applications and minimal plans to provide expedited permit issuance	
Planner I	1	Reviews Express/Volume permit applications to expedite permit issuance	
Total	23		

B. POSITIVE FINDINGS

- The Residential Plan Review group has implemented an Express Review Program that allows customers with minor projects to obtain their permit on the same day as submitted.
- The City pays for off-site plan review classes, certifications and their renewals.
- A comprehensive set of guides and check lists are available on-line to assist permit applicants prepare their submittal packages.

C. ORGANIZATION ISSUES

Management Structure

Our review of the organization chart suggests there may be an abundance of management positions. This may be as a result of several long-term vacancies that existed in key management position that were only recently filled. In an effort to promote better communication between line staff and upper management it is suggested that one level of management be eliminated. We believe the recently filled Assistant Director position will be key to implementing service improvements within his authority and we also believe this position should be designated as the Chief Building Official. (He has recently been so designated) The duties of the Division Manager for Development Services should be analyzed to determine if those duties could be absorbed by existing positions within the organization. This subject is also discussed under the Commercial Review Section and where a recommendation has already been provided.

Office Configuration

We strongly support the Department's decision to co-locate plan review from other divisions and departments on the same floor of One Texas Center as a means of facilitating communication and avoiding the creation of silos. To enhance employee productivity it is important to create a working environment that respects the unique characteristics of the employee's job. Performing quality plan reviews frequently requires extended periods of concentration and the ability to lay out large set of plans simultaneously. While we are recommending that the Department embrace the practice of accepting digital plans, we also recognize that the submittal of printed plans will still be a practice that many customers will want to continue. It is imperative that plan review staff have sufficient desk and office space to easily maneuver multiple sets of plans. We also recognize that plans examiners are asked to meet face-to-face with design teams to review plans. Currently there are virtually no conference rooms readily available for plan review staff to use when meeting with customers so they must cram into the plans examiners space and into the adjacent walkways. These types of meetings are not only uncomfortable for the participants but also impact the concentration of other plans examiners attempting to work in adjacent cubicles.

286. *Recommendation:* **The workspaces provided for the plan review staff must be of sufficient size to accommodate the placement of multiple sets of open plans or be configured to accommodate electronic plan reviews.**

287. *Recommendation:* **A group of small conference rooms should be constructed in the second floor to facilitate small group meetings with staff and customers.**

Performance Standards

The performance standards applicable to the Residential Plan Review Section include both the plan review turnaround times and the customer wait times at the intake counter. The table below identifies the performance measures we recommend for Residential Plan Review. These numbers were generated based on our experience working with other jurisdictions throughout the country and represent what we believe a jurisdiction the size of Austin should be able to offer its customers.

**Table 62
Residential Plan Review Turnaround Time Targets, Working Days**

Activity	Initial 6+Review	Suggested Initial Review	Update Review	Suggested Update Review, First Cycle	Second Cycle	Third Cycle
RESIDENTIAL						
Addition	5	5	5	3	2	1
Demolition	3	3	0	0	0	0
Relocate	3	3	0	0	0	0
Remodel	2	2	2	2	1	0
Residential	5	5	5	3	2	1
Smart Housing	5	5	5	3	2	1
Volume Builder	5	5	5	3	2	1
Volume Builder, Smart Housing	5	5	5	3	2	1

288. ***Recommendation:*** The Department should adopt the performance standards in the table above for Residential Plan Review turnaround times.

Table 63
Performance Measures Residential Review

One Stop	2011	2012	2013	2014	2015
Residential Review					
FTEs	16.25	17.25	21.25	18.25	19.25
Customer wait times (minutes)	18	15	30	21	
Cycle time for new residential zoning review (days)	15	14	21	27	27
# applications reviewed	6,934	9,787	11,618	9,984	9,000
Ratio applications/FTEs	427	567	540	318	468
FTE based on benchmark	benchmark	22.9	27.2	13.6	21.1
# New residential applications	1,598	1,996	2,894	2,870	2,800
Ratio new residential/FTEs	98.3	115.7	136.2	109.6	145.5
FTEs based on benchmark	benchmark	20.3	29.4	20.3	28.5
# walk-in-customers	10,464	6,224	8,340	12,140	
Ratio walk-in customers/FTEs	644	361	306	318	NA
FTEs based on benchmark	benchmark	9.7	10.2	9.0	NA
% on-time initial new residential zoning reviews	91%	84%	25%	38%	25%

When we review these performance measures we recognize the value of tracking activity levels so that resources can be either increased or decreased based on the anticipated future workload. The real value of tracking activity levels comes from combining the information in such a way that it assists management in making decisions about how to allocate resources in a manner that will allow the City to meet its established performance standards. The City has established a plan review initial turnaround standard of seven (7) calendar days, *Residential Plan Review Turnaround Time Targets Table 62*. It is not clear from the information in the Performance Measures Table that compliance with that standard is actually being measured. As repeated elsewhere in this report, we recommend establishing performance standards with the expectation that those standards will be achieved at least 90% of the time.

The performance measures identified above could be more valuable if the information was combined in a way that illustrates relationships between activity levels and staffing levels. We have added several rows of ratio comparison data to the table provided by staff. Establishing ratios between specific activities and the number of staff assigned to complete those activities has provided other jurisdictions with some broad guidance in the past. This approach assumes that all staff is performing at acceptable levels and that individual performance is being adequately monitored, otherwise the information would be of limited value.

289. *Recommendation:* The information provided in the Residential Review Performance Measures Table should be expanded to include relationships between activity levels and available staffing.

As the information in the table indicates, it is important to select data that can be assumed to reflect true activity levels. Reviewing the FTE numbers based on a comparison to the benchmark year of 2011 for three separate categories of activities produced results that suggest the Section was either understaffed or over staffed based on which activity is measured. It is therefore important to be cautious in utilizing this simple comparison method as the sole justification for establishing appropriate staffing levels. Based on this method and incorporating the fact that the established turnaround times are only projected to be met 25% of the time for 2015 we believe there is a clear indication that additional plan reviewer resources are required in order to improve plan review turnaround times. A recommendation regarding appropriate staffing levels is provided under the Staffing Levels section of this report.

Residential Intake Reporting In conjunction with the recommendation to have residential technical plan review report to the Chief Plans Examiner, we believe the staff for Residential Intake and the Express/Volume Builder program should also be combined with the Commercial Review Section. By co-locating the plan intake for both residential and commercial plan review we believe there will be more consistency in plan processing, including the introduction of a more comprehensive plan completeness review prior to accepting plans for formal review. While we are aware of the difficulty that might be experienced by trying to combine these two services at a single location due to limited available counter space, we think the recommendation warrants strong consideration. With the proposal to eliminate many of the work cubicles currently located in the Building Inspector's area, it may be possible to relocate some staff and their functions to those spaces and thereby free-up space on the second floor to accommodate the combined intake counter.

290. *Recommendation: Combine the Residential and Commercial Intake counters at a single location.*

Project Managers

Interviews with staff indicate that there is a Project Manager program in place in the Residential Plan Review Section that assigns projects that require planning review to a Planner and those projects that don't require planning approval to a Technical Plans Examiner. As we have we stated in the Commercial Review section of the report, we support this concept because it establishes a single point of contact for the customer to contact when their project does not seem to be moving forward as expected. While we have heard this program exists, there does not seem to be any documentation that formally defines the roles and responsibilities of the designated Project Manager. In other jurisdictions we have surveyed we have recommended that formal Memorandums of Understandings (MOU) be created to better define the roles of the departments in the Project Manager program. We have been advised that some MOU's may exist for this purpose but they have not been reviewed in many years and may be unfamiliar to many existing staff members.

291. *Recommendation: A formal policy needs to be written to formally establish the Project Manager Program and any existing MOU's need to be updated and distributed to staff.*

Residential Plan Review Counter Wait Times

Throughout this report we have been stressing the need for performance standards to be expressed in terms of a standard that can be achieved at least 90% of the time. The Department has consistently used a performance standard that is representative of an average of the activity being measured. We believe there is a tremendous difference in the two measuring methods. We have found that it is much more useful for customers to know they have a 9 out of 10 chance of receiving service within the time quotes as the Department's performance standard. Stating a performance standard that the Department only expects to achieve 50% of the time creates an opportunity for the system to have wildly fluctuating service times that appear to be acceptable as an average. This is particularly alarming given the number of entries that are recorded as 0 time used. A more realistic picture of actual wait times can be established by analyzing the data to determine at which point 90% of the customers would have been served. The customer

wait time indicated for FY 14 in the Performance Measures for the Residential Plan Review Table states the average wait time is 15 minutes. The Table we have prepared below analyzed the data based on meeting a 90% compliance threshold. As can be seen in the Table, the wait times for the majority of services provided at the counter are significantly greater than the 15 minutes being reported to the public. The actual time to serve 90% of all of the customers was **1 hour and 3 minutes**.

See earlier recommendations at meeting maximum 15 minute wait times at all counter.

**Table 64
Residential Review Wait & Transaction Times**

(Reporting Period August 2014)

Service	Count	% of total	90% Wait Time	90% Transaction time
Appointment	619	52%	46 minutes	34 minutes
Information/Questions	360	30%	1 hr 14 min	31 minutes
Express Permits	119	10%	1 hr 14 min	36 minutes
Residential Demolition	55	5%	55 minutes	42 minutes
Technical Consulting	30	3%	1 hr 1 min	41 minutes
Expired Permits	3	0%	21 minutes	27 minutes

292. ***Recommendation:*** The Residential Plan Review Division should report counter wait times based on a 90% achievement standard for each major category of service provided.

The chart above identifies the major categories being used to track activity. Upon closer review it is clear that the most commonly used activity identifier is *appointment*. This appears to be a catchall category that does not adequately convey the actual purpose of the customer's visit. Staff should be directed to strive to be more accurate in identifying the purpose of a customer's visit so that the data being collected can be more useful to decision makers.

293. ***Recommendation:*** Counter staff should be more specific in identifying the purpose of a customer's visit to the Department.

Staffing Levels

The issues regarding appropriate staffing levels for the Residential Review Section are very similar to those identified under the Commercial Plan Review section of this report. The Managers in this group have not established a means of identifying workload units so that the cumulative workload can be compared against the existing staff's workload capability. Establishing a measurable workload unit should be a priority. As a minimum, staff should be directed to track their time based on specific projects in AMANDA so that a set of time estimates can be established based on the complexity of the projects that were being reviewed.

294. Recommendation: Staff to track their time on a project basis in AMANDA so that the data can be used to establish basic workload units.

295. Recommendation: When sufficient data has been collected to validate workload units then the Manager should compare total workload against available staff capacity for the purpose of establishing appropriate staffing levels.

A review of the data in the Table (*Residential Plan Review Turnaround Time Targets*) that was provided by staff is somewhat confusing with regard to the anticipated level of performance for 2015. Stating that the established initial zoning review standard, which in prior years had been in the range of 81% to 91%, is projected to only be met 25% of the time in the coming year should have been accompanied by a request for a specified number of additional staff for the coming year in order to achieve the established performance standard. An alternative approach of addressing this issue is to clearly identify to the public what actual turn-around times are being consistently achieved by staff. As identified in Table 62 (*Residential Plan Review Turnaround Time Targets*), we recommend that the turnaround times for initial residential review be no more than seven calendar days (5) working days and that subsequent reviews be one-half of the original targets. Rather than extending out the turnaround target time the Department should add staff resources until the established performance standard is achieved. Given the lack of detailed information on workload units, it is recommended that staff be added incrementally and the degree to which such additions reduce turnaround times be closely monitored so that a specific ratio can ultimately be established. Reviewing historical data to compare staffing and activity levels with current activity levels will provide a base staffing level that should be adjusted in consideration of what performance standards were being met at those previous staffing ratios and how much more complicated the Codes have become in recent years. It is not reasonable to assume review staff can

achieve historical levels of performance if the requirements they are entrusted to enforce have become much greater in scope or complexity.

Table 65
Residential Activity Staffing Ratios

FY	Residential Permits (1 & 2 units)	FTEs	Permits/FTEs ratio	On time %
2011	1625	16.25	100	94%
2012	2254	17.25	130	84%
2013	2670	21.25	125	82%
2014	1877	18.25	103	26%

The table above compares residential permit activity for one and two family dwellings against the total staffing available in the Residential Review group on a year-by year basis. This is a very broad-brush approach to identify the ratio of permits per staff FTE that reflected a staffing level capable of achieving a specified level of on time performance. This approach would suggest that a permits to staff ratio of 100 should be able to generate an on time compliance of over 90%. Under this approach the current permits to staffing ratio of 103 should be capable of generating an on time performance near 90%. The fact that the current staffing level is only generating a 25% on time rate suggests there are other forces that must be considered. We believe the fact that the scope of review has changed to include a technical building code review and the extremely high level of staff turnover in this group have both contributed to what appears to be a significant reduction in staff performance. The use of historical data for projecting future staffing needs should be tempered with the understanding that expanding job responsibilities and the experience of the available workforce can have a dramatic impact on perceived levels of efficiency.

Late in our study we managed to conduct a trial calculation of backlog. Our methodology indicated that there is a backlog of 119 cases in residential plan review. Obviously, there is need for additional analysis on this issue. We also received major customer comments concerning residential plan review. We speculate that in addition to timing concerns there were issues related to quality of reviews, nit-picking items, etc.

Given the anticipated poor performance projected for the future it is apparent that some staffing adjustments should be considered to improve the prospects for better on time performance in the future. Rather than attempt to quantify the specific number of additional staff that should be hired to achieve the 90% compliance rate in the future, it

would be more appropriate to recommend the hiring of temporary contract staff to reduce backlog and to provide current senior staff with some relief so they can concentrate on providing more comprehensive training for less experienced residential review staff. As an initial effort, the contract staff should be the equivalent of two staff.

296. *Recommendation: The Department should hire qualified contract plan review staff to help eliminate plan review backlog and to provide relief for staff to concentrate on enhancing their code knowledge so they can expand the scope of their reviews.*

Technical Plan Review Staff Reporting

Implementing our recommendation to expand the scope of plan review for residential projects will impose a significant challenge on existing staff, the supervisors and managers in that reporting structure. We believe it would be more appropriate for this group to report through the Commercial Chief Plans Examiner. This structure will provide greater technical support for the residential plans examiners and may provide the combined groups with an enhanced level of flexibility that will improve overall technical training and customer service.

297. *Recommendation: The Residential Technical Plan Review group should be reassigned to report through the Chief Plans Examiner.*

Training

Implementing our recommendation to expand the scope of technical plan review for residential projects will require a substantial investment in training. There are a variety of opportunities to receive the desired training including ongoing in-house training sessions, off-site training classes and on-line training classes. We support the use of all of these venues and encourage supervisors to track employee's attendance at these classes. It should also be emphasized that the City should not only allocate time for staff to attend these essential training classes but should also pay any registrations costs associated with attendance including purchase of required materials. As stated in the general discussion section of this report, we recommend that 2% of the budget be allocated for staff training and that at least 5% of staff's time be dedicated to receiving training appropriate for their position.

298. *Recommendation:* Implementing a more comprehensive residential technical plan review program should be accompanied by an expanded staff training program.

Interviews with zoning staff revealed a strong desire to receive much more training on the proper application of the zoning requirements. Some of the need arose from what staff perceived as an endless succession of changes to the Land Development Code. They stated that many times they were not notified of the change or were not given any reasoning for the change. This left them either uninformed or lacking in the ability to justify the change to customers when asked. The need for better communication on these types of issues has been covered elsewhere in the report, but there is also a training component that should be addressed. The staff that has assigned to generate ordinance changes is not the same staff that ultimately enforces the new requirements. We recommend that these two groups meet periodically for joint training sessions to review those subjects that impact both groups.

299. *Recommendation:* The Residential Review Planners should conduct periodic joint training sections with staff from Current Planning.

Employee comments identified the need for greater training on computer based programs including training to generate management reports in MicroStrategy, using Adobe to prepare professional looking informational handouts and more advanced training on the use of GIS. A survey of employees should be conducted to identify their perceived needs for additional computer related training and a program should then be created to provide that training that would be most beneficial to the Department. The Department also has very few facilities that can be used for group training on computer applications. A conference room with appropriate audio/visual equipment should be created to facilitate in-house computer software training. An alternative to using a conference room for computer training would be to establish a computer lab or to make arrangements to reserve the Economic Development Department's Business Solutions Center for such training.

300. *Recommendation:* Employees should be surveyed to determine what additional computer training should be provided to enhance the Department's performance.

D. POLICY ISSUES

Audit Program

Like many other operations with the PDRD, maintaining high quality services is the goal of management and the employees. We find the most effective way to achieve consistently high quality standards is to implement an audit program. The audit program for plan review staff would entail a periodic review of plans recently reviewed and approved by a zoning or technical building plans examiner. The supervisor would be evaluating the completeness of the plan reviewers work and confirm that code interpretations are being applied consistently within the group. This approach will also allow the supervisor to determine if the reviewer was engaging in the practice of failing to conduct a thorough review on the first check and then identifying a lengthy list of corrections on the second review of items that should have been identified during the initial review. This technique of providing a cursory first review allows the reviewer to appear to have met the required timeline for a comprehensive review. Several of our customer surveys indicated that this was a common practice among some reviewers. Anything short of an audit program would not be able to detect and correct this practice. Such an audit program would include the supervisor periodical contacting customers and inquiring about the level of service that was provided by the reviewer. This type of program also helps alert supervisors to the need for additional group training to reinforce the need for reviews to be uniform and consistent.

301. *Recommendation:* The supervisors for the zoning reviewers and technical building code reviewers should implement a comprehensive audit program to confirm that high quality services are being consistently being provided.

Communication

A great deal of frustration is being expressed by employees responsible for implementing the zoning requirements in a manner consistent with zoning regulations adopted with neighborhood plans and the numerous updates to the Zoning Code that were processed by Current Planning staff. The Residential Review staff performing zoning reviews state they are frequently unaware of recently implemented changes to the zoning requirements. They often discover these new requirements when a customer advises them that they are not interpreting the zoning code properly. Being alerted to these new requirements by the public rather than through internal communication channels is both embarrassing to staff and seriously undermines their confidence in performing their job. It also erodes customer confidence in the City. The Residential Review staff has also indicated that they

would have preferred to be advised of these changes when the subject was initially being considered for a change. They felt that their input in the process would be a valuable addition to that process because they are the staff most familiar with the perceived problem with the existing code language. They have stated that on some occasions the new code language processed by Current Planning staff not only failed to address the perceived problem but instead actually created a more confusing set of requirements.

302. *Recommendation:* Management in Current Planning and Residential Review need to create a communication process that ensures appropriate staff are notified of potential code changes that will affect their operation prior to implementation.

It is well known by staff that customers will frequently “shop around” with various planning staff in an effort to find a planner that will provide them with an opinion favorable to their project. This process often begins with a full disclosure by the applicant of their intent, but upon receiving an unfavorable decision from one planner, will try another planner on another day and with a description that fails to provide a true and complete description of the proposal. This process can continue for an extended period of time until the customer receives the favorable answers they were seeking. This process can consume considerable staff time and eventually lead to internal conflicts between staff members when different opinions are rendered. Rarely does the customer admit that they provided each planner with different information in order to craft the answer they wanted. Other jurisdictions faced with this dilemma have initiated a program that requires the planner to make an entry into the land based permit system that summarizes the nature of the inquiry and the interpretation provided by staff. This program dramatically reduced practice of “shopping around” which ultimately save the group considerable staff time.

303. *Recommendation:* The planners providing customer consultations should record a short summary of their meeting with the customer in the AMANDA system for future staff reference. Management should audit these summaries to assure that they are being properly recorded.

One of the other areas receiving attention regarding communication problems is the interface between plan review staff and field inspection staff. It is quite common for us to hear of communication problems between office and field staff. The potential for this to occur in Austin is even greater because the field inspection staff have very few opportunities to interact with plan review staff because they rarely come to the office.

One of the ways other jurisdictions have successfully addressed this issue is to provide office staff, including plans examiners, the opportunity to participate in a ride-along program with the a field inspector. Such events provide the participant an opportunity to observe how their actions in the office impact the ability of the inspector's ability to perform their job. This is particularly relevant to Austin during a time when the scope of technical plan review is being expanded. Reaching a common understanding about the level of detail that should be included on the approved plans will make this program enhancement much smoother.

304. *Recommendation:* **The Building Official should direct staff to create a ride-along program that allows each plans examiner to periodically accompany an inspector in the field.**

Expired Permits

The current program that requires all expired permits to be resolved before a new permit can be issued has been discussed elsewhere in this report followed by our recommendation that the program be abandoned except for those projects where a specific life safety hazard has been previously identified. The process of identifying these specific projects in the AMANDA system needs to be established in cooperation with the group that initially identified the life safety issue.

305. *Recommendation:* **The Residential and Commercial Plan Review Coordinators needs to work with the staff from Austin Code to develop a process to identify expired permits in the AMANDA system that have outstanding life safety issues.**

Scope of Technical Plan Review

As mentioned in the Profile portion of the section of the report, the Residential Review Section only began including a technical review of residential projects approximately three years ago. Prior to that time there was no formal plan review of residential projects against the adopted technical codes other than the review provided by the inspection staff in the field while the project was being constructed. This is a highly unusual process for a large jurisdiction like Austin. While there has been an effort to implement a process that includes a technical plan review that review is very cursory in comparison to the level of review conducted by other jurisdictions comparable to Austin in size and complexity. We

believe the technical plan review currently provided for residential projects needs to be more comprehensive and include a review of plans stamped by Licensed Architects and Registered Engineers. The intent of performing a more comprehensive review of the submitted plans is not to have the City assume any responsibility for the design of the structure, that responsibility remains with the design professional, but rather to confirm that the minimum requirements of the adopted codes have been incorporated into the plans prior to construction. To adequately perform this enhanced plan review service it will be necessary for existing staff to expand their knowledge of those technical code requirements applicable to residential construction. It will also be necessary for them to demonstrate this knowledge through the attainment of appropriate nationally recognized certification. As stated in the report section for Commercial Plan Review, plan review staff should be certified in those disciplines for which they have been assigned to review. In conjunction with this requirement should be the establishment of a career ladder for Plans Examiners that recognizes their particular areas of expertise through certifications and possession of Licensure as a Professional Engineer or Registered Architect. See the Commercial Plans Examiner section for recommendations that apply to certifications and creation of a career ladder for Plans Examiners.

306. *Recommendation:* The overall scope of residential plan reviews needs to be expanded and Plans Examiners need to be certified to perform residential plan review.

E. PROCESS ISSUES

Table 66
Performance Measures Residential Review

One Stop	2011	2012	2013	2014	2015
Residential Review					
FTEs	16.25	17.25	21.25	18.25	19.25
Customer wait times (minutes)	18	15	30	15	
Cycle time for new residential zoning review (days)	15	14	21	15	27
# applications reviewed	6,934	9,787	11,618	5,800	9,000
# New residential applications	1,598	1,996	2,894	2,000	2,800

# walk-in-customers	10,464	6,224	6,521	5,800	
% on-time initial new residential zoning reviews	91%	84%	81%	85%	25%

Audit Program

We have recommended that the scope of the technical building review be expanded, in order to confirm this program is operating in a uniform and consistent manner it is essential that a comprehensive audit program be implemented. The program should consist of supervisory staff periodically reviewing the quality of the work being performed by staff. A set of performance standards should be in place and individual employee's performance should be compared against these standards. When deficiencies are observed during the audit process they should be addressed immediately and documented for future reference and potential inclusion in future employee performance evaluations. Deficiencies that are observed in the work performed by multiple staff members, points to the need to provide enhanced training for the entire group of Plans Examiner.

307. Recommendation: The Building Official should direct the Residential Services Manager to implement a comprehensive audit program for the work performed by the Zoning Plan Review and Technical Plan Review staff.

Completeness Check

One of the complaints expressed by Residential Plans Examiners was the inconsistency they observed in the quality of the completeness checks that were being performed prior to acceptance of plans for formal review. The ability of the plan review process to work efficiently is highly dependent on the quality of the initial plan submittal. While the staff in the intake section is not responsible for performing plan reviews beyond confirming the project is located in an appropriate zone, they are responsible for verifying that a minimum amount of information has been incorporated into the plans. It should be the responsibility of the supervisor for this group to periodically audit the work performed by staff and to incorporate any observed deficiencies into future training programs and individual performance improvement plans.

308. Recommendation: The work performed by the intake staff should be audited periodically to confirm completeness checks are comprehensive and consistent.

Express Plan Reviews

We support the Department's efforts in establishing an Express Plan Review program as a means of expediting permit issuance for minor projects. We have seen these types of programs work very effectively in other organizations when the staff providing the service has both the technical knowledge and personality to meet the challenge. With our recommendation to establish a career ladder for Plans Examiners it is anticipated that not all employees will qualify for the top level of the career ladder. Recognizing the pay differential that will exist between staff at different levels of the career ladder we recommend that Express Plan Reviews not be assigned to those individuals at or near the top of the Plans Examiner career ladder. It is not an effective use of limited staff resources to assign senior level plans examiners to projects that could be performed by employees with lessor qualifications.

309. *Recommendation: Express Plan Reviews should not be assigned to senior level Plans Examiners.*

Plan Review Completeness

An area that frequently creates conflict between staff and customers is the process by which a set of plans are reviewed to determine if they are sufficiently complete to warrant acceptance for a formal plan review. This conflict is much more likely to arise when reviewing residential construction projects because State Law allows homeowners the right to permit and perform the work themselves. With commercial work contractors and designers gain experience and ultimately develop an understanding of the amount of information that must be included on a set of plans or in a permit application to qualify for submittal. Homeowners do not possess the experience of knowing the minimum requirements thus they rarely begin the process with the sufficient information needed to qualify for submittal. The process can quickly become burdensome for both the applicant and staff. Staff has made efforts to develop educational information to assist homeowners as they attempt to navigate through the process. In 2007 the Department generated a large volume of flow charts covering many aspects of the plan approval and inspection process. These flow charts contain a significant amount of data and seem to be a good tool for employees to utilize as they learn the various processes. As a tool to assist customers, however, they appear to be too complex and difficult to read because of their extremely fine print and use of technical jargon. We recommend staff prepare a more generalized flow chart that broadly describes the permit application process so customers can familiarize themselves with the major steps in the process before they meet with staff. This information should be readily available on line. It is recognized that ultimately all of the required information must be provided before the plans can be accepted, however, a more gentle transition into the detailed approach would be beneficial to many first-time

customers. Some customer and staff comments have suggested that the current process has been deliberately designed to overwhelm first-time customers so they will be encouraged to hire a professional designer. The City should seek to overcome this perception by creating a more inviting atmosphere for first-time permit applicants.

310. *Recommendation:* The Residential Review Section should prepare a very simplistic flow chart as an introduction to the more detailed requirements of the permit submittal process.

A problem identified while observing operations at the Permit Center was that customers were being advised by Residential Plan Review Staff that their permits were ready to be issued by Permit Center staff when, in fact, there were remaining issues that should be resolved before they were sent to the Permit Center. This type of miscommunication results in significant frustration on the part of the customer and frequently results in serious delays for the applicant to obtain their permit(s). Frequently the cause of the delay is a failure on the part of the Plans Examiner to fully complete the required information on the permit application in the AMANDA system. In other cases, the property has outstanding expired permits that the current established procedures require be resolved before the permit can be issued. We believe these issues should be communicated to the applicant and resolved prior to sending the applicant to the Permit Center to discover these issues. During our on-site interviews we observed that the waiting period to see Permit Center staff was over two (2) hours. A partial explanation for these long wait times is that applicants arrive expecting to receive their permit but are confronted with additional issues that Permit Center staff is tasked to attempt to resolve.

311. *Recommendation:* Staff from the Residential Intake counter should work with Plans Examiners to confirm all required information has been entered into AMANDA and there are no outstanding expired permits for the property before they advise the applicant that their permit application is ready to be issued.

Scanning Equipment

The current process utilized by the Residential Review Section requires that all plans be scanned upon receipt and then any revised plans also be scanned. There are currently 20 employees that need to use the single scanner available to the Section. The current scanning equipment is not rated for the high usage it is receiving and therefore is subject to periodic breakdowns. This results in wasted staff time. Even when the equipment is running properly, a backlog to access the scanning equipment can result in wasted staff

time. While we believe that the Departments efforts to move towards electronic plan review will help reduce the volume of plans that must be manually scanned, that program will not be fully implemented until the public and staff embrace it. That could take several years. Until that time, the Department should invest in appropriate scanning equipment that is rated for the anticipated usage and is available in sufficient quantity to avoid wasted staff time.

312. *Recommendation:* **The Department should purchase a sufficient number of appropriately rated scanning machines as necessary to avoid wasted staff time due to breakdowns and backlogs.**

Zoning Interpretation Manual

A complaint voiced frequently by staff in the Zoning Review group is the lack of written interpretations available to help guide them in their interpretation of the often complex and confusing land use regulations. Staff has requested that a Zoning Interpretation Manual be created to help them also achieve a higher level of consistency in interpreting the zoning regulations. Frequently the creation of such a manual is nothing more than documenting those interpretations that already are being used by staff. However, it is not unusual to find that once interpretations have been committed to writing that not everyone is in total agreement with the words as written. Arriving at consensus on these interpretations is a very important part of the process and frequently results in new and valuable perspectives being considered. Such a manual would also provide great benefits to new employees as they struggle to become familiar with the unique aspects of Austin's Land Development Code. The existence of a Zoning Interpretation Manual may also help reduce the public's perception that the quality of the interpretation is highly subjective and based on the personal opinion of the assigned Planner. Comments from both the public and staff suggest there is a culture in Austin that supports the belief that every staff decision can be appealed and in most cases will be overturned by a supervisor or manager. This is a dangerous culture to allow to exist in an organization because it promotes a lack of accountability in the first-line decision makers and burdens management with routine tasks that should be performed at a lower level in the organization. There are many other issues that also need to be addressed in order to change such an organizational culture, but providing an approved Zoning Interpretation Manual can serve as an essential cornerstone in establishing a new culture.

313. *Recommendation:* **The Director should instruct management staff to prepare a comprehensive Zoning Interpretations Manual which should be available to both staff and the public.**

