

DEPARTMENT OF COMMUNITY DEVELOPMENT

ANNUAL REPORT 2016

SEWAGE DISPOSAL MANAGEMENT
PLANNING AND ZONING
CODES COMPLIANCE
BUILDING CODES
ENGINEERING

DEPARTMENT OF COMMUNITY DEVELOPMENT
WILLIAMSON COUNTY, TENNESSEE
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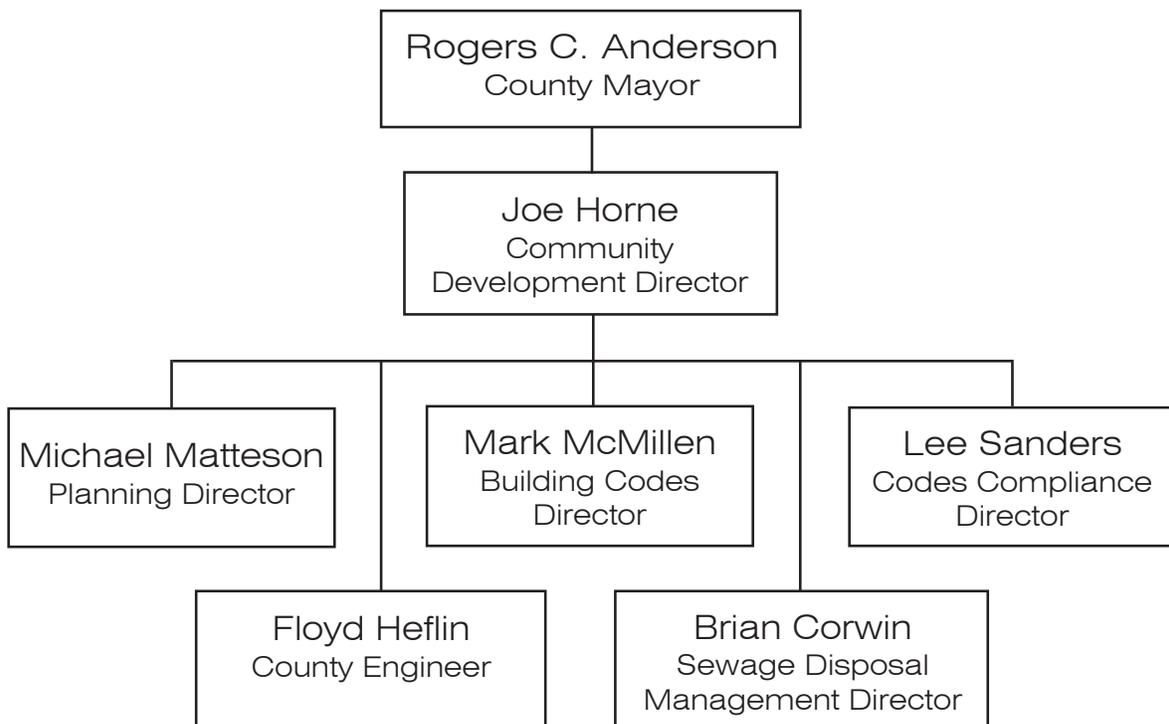
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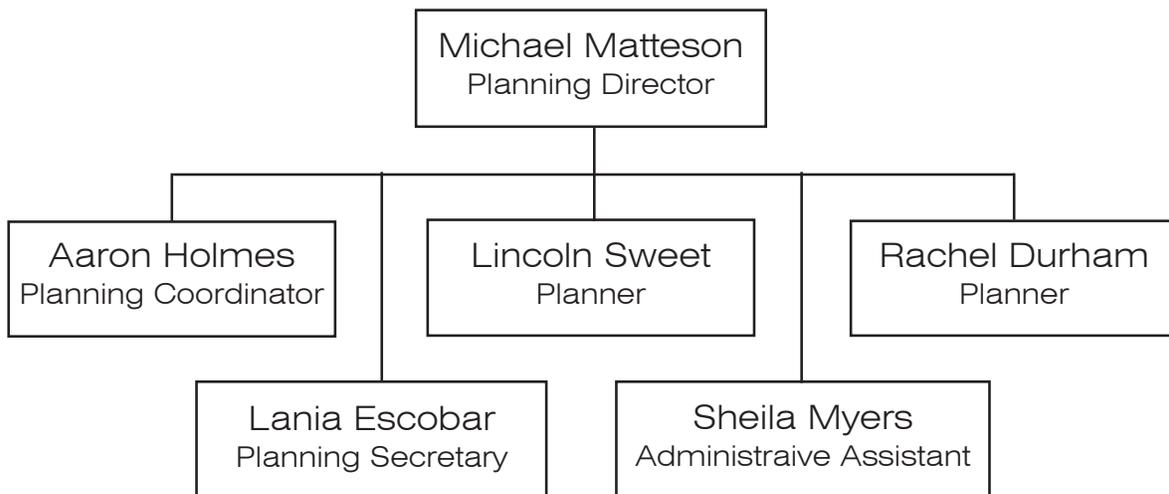
DEPARTMENT OF COMMUNITY DEVELOPMENT

The Community Development Department provides the framework for planning and development services for the unincorporated portion of Williamson County. In a county undergoing the growth confronting Williamson County, it is important these services are integrated as much as practicable. The integration of these services allows not only for the provision of housing and related services to our community, but allows for the opportunity to monitor these markets and develop new techniques to mitigate the effects of this growth.



DEPARTMENT OF PLANNING

County Planning plays a fundamental role in maintaining the quality of development in Williamson County. This role includes assisting developers and the general public in administering the Zoning Ordinance and other regulations. This department is responsible for support of the County Board of Commissioners, the Williamson County Regional Planning Commission, the Highway Commission, and other boards that may require routine aid in administering and interpreting the Zoning Ordinance, the Subdivision Regulations and for any specific research that may arise.



Overview

The County's Planning Department is located on the 4th floor of the Williamson County Administrative Complex along with the Building Codes, Codes Compliance, Engineering, and Sewage Disposal Management Departments. County Planning services are directed by Michael Matteson, Planning Director, who is assisted by Aaron Holmes, Lincoln Sweet, and Rachel Durham.

The following is a summary of the activity for 2016. This data will allow the Staff, the Planning Commission, the Board of Commissioners and the general public insight into the amount of growth within the county.

Zoning Certificates

This form is the beginning of the planning process for both the general public and developers. For every project, whether it be for a new home, an addition to an existing home, a swimming pool, a subdivision, or a non-residential development, a Zoning Certificate is required. This form serves two purposes. The first is to provide both the Staff and the applicant with a written

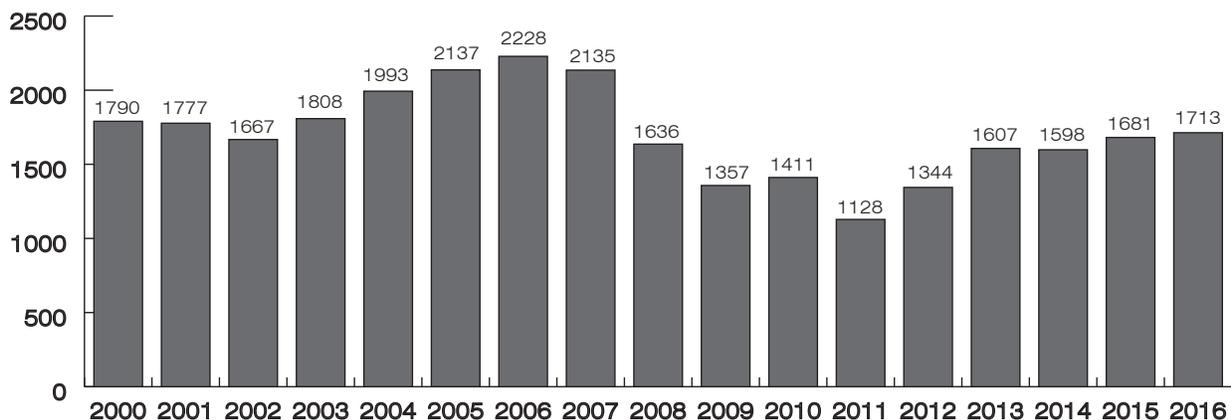
record of the required procedure to achieve an approval. Secondly, this written record can help alleviate any misunderstandings between the Staff and the applicant.

When a request for a Zoning Certificate is submitted, the Staff obtains the property assessment card, confirms the zoning, the use that is currently on the property, and the floodplain status, if any. Staff will determine if the requested use can occur on the property and, if it is allowed, the applicant may proceed. In many, the Plans Review process is required before the Staff can grant approval to a use. Plans Review provides each department, i.e. Building Codes, Codes Compliance, Engineering, Highway, Planning, and Sewage Disposal an opportunity to review the request to ensure it meets their requirements as well.

Plat Revisions

Plat Revisions affecting two (2) or fewer lots are subject to review and approval by the Staff. There are many different items that may be dealt with on a revised plat, including a lot line shift. In 2016, Staff processed forty-three (43) plat revisions.

Zoning Certificates Issued Annually



Major Subdivisions

Major subdivisions are those consisting of three (3) or more lots. Under this category, there are Traditional Subdivisions, Conservation Subdivisions and Large Lot Easement Subdivisions. The following table details the Final Plat activity related to major subdivisions for 2016.

Minor Subdivisions

Minor Subdivisions consist of no more than two (2) lots. Where there are no bondable improvements required, Staff has the discretion to review and approve these plats. In 2016, Staff processed nineteen (19) Minor Subdivisions consisting of twenty-five (25) lots.

Table 1: Major Subdivisions in 2016

	Name	Section	Lots
1	Savage Pointe Woods	Large Lot Easement	4
2	The Manor at Highclere	Large Lot Easement	5
3	Clovercroft Preserve	Section 1	63
4	Holliday & Associates	Large Lot Easement	1
5	The Sandra Moran Zimmerle	Large Lot Easement	1
6	Binkley	Large Lot Easement	2
7	Rose Ridge	Large Lot Easement	4
8	Blackhawk	Section 2, Revised	3
9	Southern Preserve	Section 1	4
11	Jerry Remus Property	Large Lot Easement	5
12	Country Estates	Large Lot Easement	4
13	The Farms at Clovercroft	Section 2	28
14	Silver Stream Farm	Section 4G	16
15	Enderle Property	Large Lot Easement	2
16	Southern Preserve	Section 2	16
17	Water Leaf	Section 1	20
18	Falls Grove	Section 3	22
19	Savage Pointe Woods	Large Lot Easement Subdivision, Revised	4
20	Lookaway Farms	Section 1	47
21	The Grove	Section 8	5
22	Cartwright Close	Revised	16
23	Clovercroft Preserve	Section 1, Revised	63
24	Kings Chapel	Section 7, Revised (Street Name Change)	9
25	Rock Hill Farms	Large Lot Easement	4
26	Hideaway at Arrington	Section 3	39
27	Brenda Hale Property	Large Lot Easement	5

Non-Residential Site Plans

The Planning Commission has reviewed a diverse range of non-residential site plans. In 2016, there were six (6) non-residential site plans reviewed. Those plans reviewed are outlined in Table 2.

Minor (Staff Level Reviews) Site Plans

The Zoning Ordinance allows Site Plans for certain uses in certain Zoning Districts to be reviewed and approved by Planning Department staff, rather than by the Planning Commission. Table 3 lists those Site Plans approved at the staff level in 2016.

Table 2: Non-Residential Site Plans Reviewed

	Project Name	Square Feet or Acreage	Comments
1	Ingram	252.27 AC	Wastewater Treatment/ Disposal System
2	Sullivan	407.18 AC	Wastewater Treatment/ Disposal System
3	Spring Hollow Farms	142 AC	Wastewater Treatment/ Disposal System
4	New Approach School of Jewelry Arts	8,757 SF	School
5	Fiddlers Glenn	182 AC	Wastewater Treatment/ Disposal System
6	Oak Valley Baptist Church	15,325 SF	Addition

Table 3: Minor Site Plans Reviewed

	Type	Square Feet or Acreage	Comments
1	Arrington Vineyard	20,858 SF	Retail Addition
2	The Grove, Section 5	1,500 SF	Boat House
3	Surefire Fireworks	1,500 SF	Temporary Fireworks Tent
4	Battle Mountain Farms	4,000 SF	New Building
5	Belleview Cumberland Presbyterian Church	2,400 SF	New Pavilion
6	St. Matthew Catholic Church	N/A	Revised Site Entrance
7	Ricky's Produce	900 SF	Temporary Produce Stand
8	Grace Christian Academy	N/A	New Lighting
9	Dolan's Commercial Venue	N/A	Revision to Drive Lane
10	Weatherford Estates	672 SF	Temporary Sales Trailer
11	Christmas Tree Village	18,400 SF	Seasonal Sales

Text Amendments

In 2016, there were twenty (20) amendments to various regulations utilized by the Planning Department. Some of these amendments go hand in hand, i.e. if one regulation is amended, another might have to be amended in order to achieve the desired result.

- There were thirteen (13) amendments to the 2013 Williamson County Zoning Ordinance.
- There were seven (7) amendments to the Williamson County Subdivision Regulations.
- There were no (0) amendments to the Williamson County Stormwater Regulations.
- There were no (0) amendments to the Williamson County Wastewater Regulations, which are a part of the Williamson County Zoning Ordinance.

Map Amendments

A new Zoning Ordinance (2013 Zoning Ordinance) and Official Zoning Map (2013 Zoning Map) were adopted in May of 2012. No amendments to the new Official Zoning Map were approved in 2016.

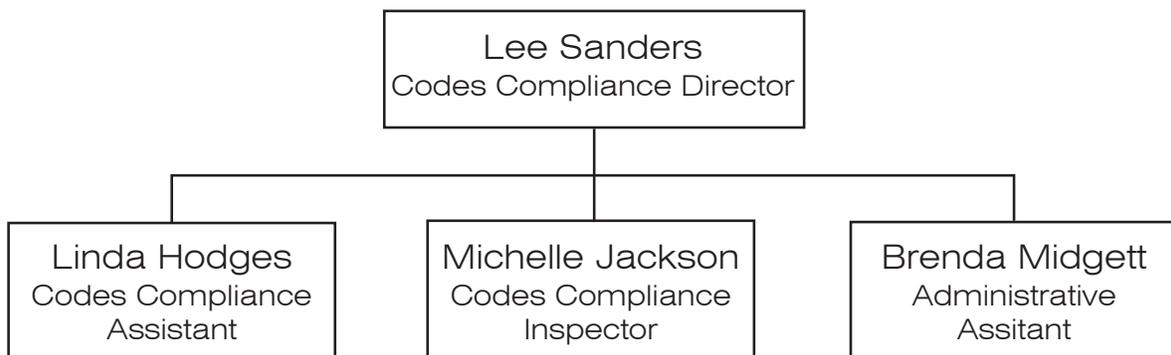
Department Goals for 2017

The Planning Department has established three primary goals for 2016. The first goal is to complete a revision to the County's Subdivision Regulations, which govern the subdivision of property within the unincorporated County. The second goal is to work with a consultant team to complete work on a Comprehensive Traffic Strategy for the unincorporated County. This project entails evaluating current traffic conditions, projecting future traffic conditions, and developing a comprehensive set of strategies to help manage traffic in the unincorporated County in the most effective way possible. The third goal is to begin working with the Triune community to develop a Special Area Plan for the Triune Village.

DEPARTMENT OF CODES COMPLIANCE

Codes Compliance plays an integral role in maintaining the quality of life in Williamson County, assisting developers and the general public negotiating zoning and other regulations to the mutual benefit of both. This department is responsible for support of the Board of Zoning Appeals and other boards for the routine processes of administering and interpreting the Zoning Ordinance, issuing sign permits, zoning inspections, and for specific research as the need arises. Codes Compliance is the enforcement branch of the Community Development Office.

Codes Compliance is located on the 4th floor of the Administrative Complex, along with the Building Codes, Planning and Engineering Departments. Codes Compliance activities are directed by Lee Sanders, Codes Director, who is assisted by Linda Hodges, Michelle Jackson and Brenda Midgett.



2016 Board of Zoning Appeals Members

Dave Ausbrooks | Chairman
 Steve Wherley | Vice Chairman
 Don Crohan | Secretary
 * Representing the Planning Commission
 Sue Workman | Member
 Karen Emerson-McPeak | Member

Inspections

The Codes Compliance Department is also responsible for numerous inspections and related enforcement. Some of these inspections are based on zoning and building permit activity and some are initiated from complaints received from the public. Compliance inspectors are expected to initiate inspections of violations and non-permitted construction as they patrol the county.

Table 4: Cases Reviewed by the Board of Zoning Appeals

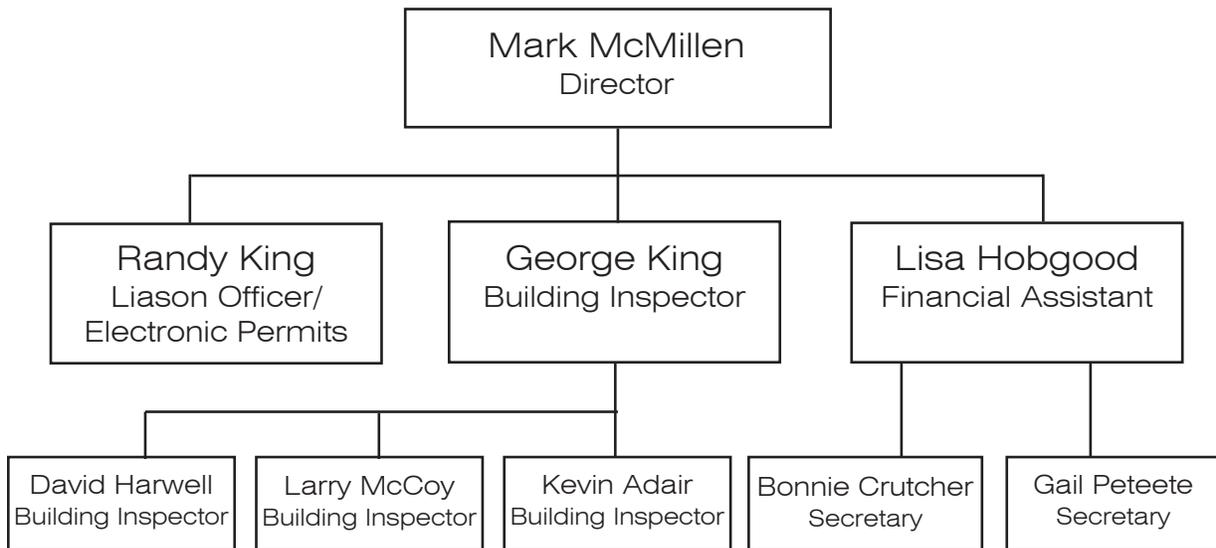
	2012	2013	2014	2015	2016
Total Agenda Items	13	16	16	18	23
Variances	5	4	3	8	3
Appeals	0	1	0	0	0
Special Uses	5	5	11	8	18
Other	3	6	2	2	2

Table 5: Cases Reviewed by the Board of Zoning Appeals

	2012	2013	2014	2015	2016
Online Form Submittals	59	49	40	32	53
Complaints Logged	133	141	125	125	110
Complaints/ No Violation Cited	39	50	57	41	51
General Code Violations (Complaints - No violation)	94	91	68	97	59
Cases Closed This Year	131	77	144	91	107
Signs Removed *	360	404	406	363	417
Sign Violation Notices*	83	68	93	56	96
Sign Permits	69	64	50	48	63
Overgrown Lot Cases	23	17	16	12	10
Overgrown Lot Inspections	69	39	34	28	26
Pool Fence Inspections – Building Permitted	162	162	171	213	261
Mobile Home and Replacement Inspections	42	6	24	15	12
Barn and Accessory Structure Finals Zoning Permit.	28	33	52	66	60
Junk Car Cases	19	19	12	18	12
Junk Car Inspections	64	13	29	33	27
Department Phone Calls	1613	1715	1422	1554	1574

DEPARTMENT OF BUILDING CODES

Serving a necessary role in the development of Williamson County, the Department of Building Codes insures that all construction within the unincorporated areas of the County meets current building codes adopted by the Board of Commissioners. Grouped under Community Development with Codes Compliance, Engineering, Sewage Disposal Management, and Planning, the Building Codes Department is directed by Mark McMillen.



Building Permits

The Department of Building Codes is responsible for the issuing building permits for unincorporated area of Williamson County.

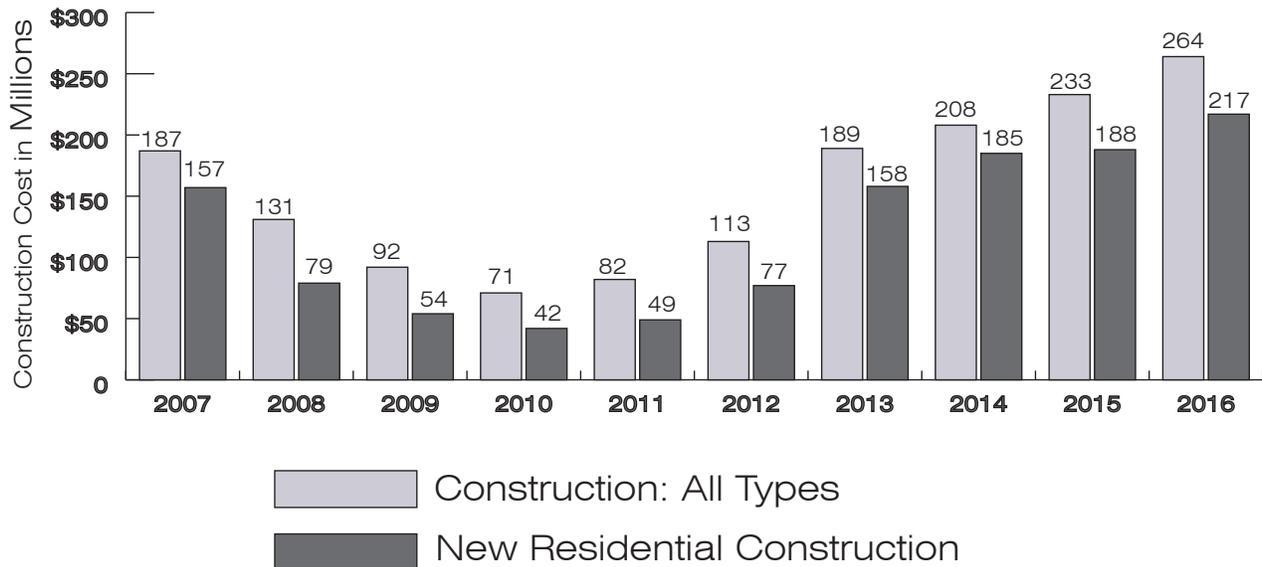
Table 1: Building Permits and Valuations

Year	Permits Issued for New Single Family Residences	Valuation of SFR Permits (in millions)	Total Permits Issued	Valuation of All Permits (in millions)
2016	442	\$217M	856	\$264M
2015	433	\$188M	825	\$233M
2014	426	\$185M	762	\$208M
2013	433	\$158M	814	\$189M
2012	240	\$77M	596	\$113M
2011	157	\$49M	505	\$82M
2010	129	\$42M	610	\$71M
2009	139	\$54M	483	\$92M
2008	193	\$79M	636	\$131M
2007	322	\$157M	781	\$187M
2006	448	\$188M	865	\$221M

Building Permits Issued



Total Construction Costs



Adequate Facilities Tax

Officially referred to as Privilege Tax, this tax is assessed on new residential and commercial structures to offset the cost of growth on the County’s infrastructure. Building Codes has the responsibility of assessing and collecting this tax for both the unincorporated area of the county as well as for the cities of Brentwood, Franklin, Nolensville, and Spring Hill. These funds, once collected, are deposited with the County Trustee.

Effective July 1, 2007, the County Board of Commissioners enacted a new “Adequate Facilities Tax” (AFT) in schools. This additional \$1.00 per square foot is devoted solely to construction of new schools and is collected on new residential structures only. All new County residential construction is assessed at \$2.00 per square foot, including areas that may be completed at a later date. Areas not included are unfinished basements,

garages, carports, porches and accessory structures. All County commercial structures under roof are computed at \$0.34 per square foot. This includes areas such as bank drive thru, covered service station islands and material storage areas. City residential construction is also assessed at \$2.00 per square foot. Building Codes is now collecting these fees for all cities within Williamson County including Fairview and Thompson’s Station, which were added in March 2017.

Table 2: County Residential Revenue Distribution

Purpose	Amount
Schools*	\$0.70
Roads	\$0.20
Parks/Rec	\$0.08
Fire Protection	\$0.02

*Does not include \$1.00/ft² for the new Adequate Facilities Tax (AFT).

Table 3: Commercial Residential Revenue Distribution

Purpose	Amount
Roads	\$0.30
Fire Protection	\$0.04

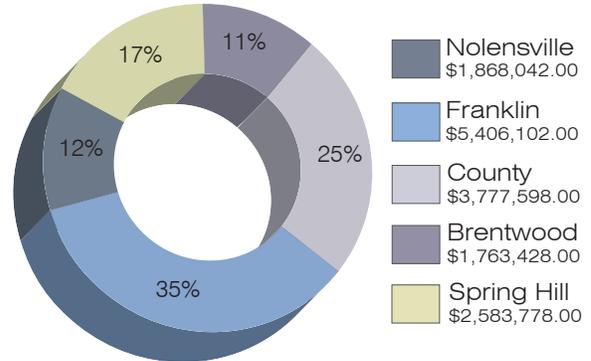
Table 4: City Residential Revenue Distribution

Purpose	Amount
Schools*	\$0.92
Parks/Rec	\$0.08

*Does not include \$1.00/ft² for the new Adequate Facilities Tax (AFT).

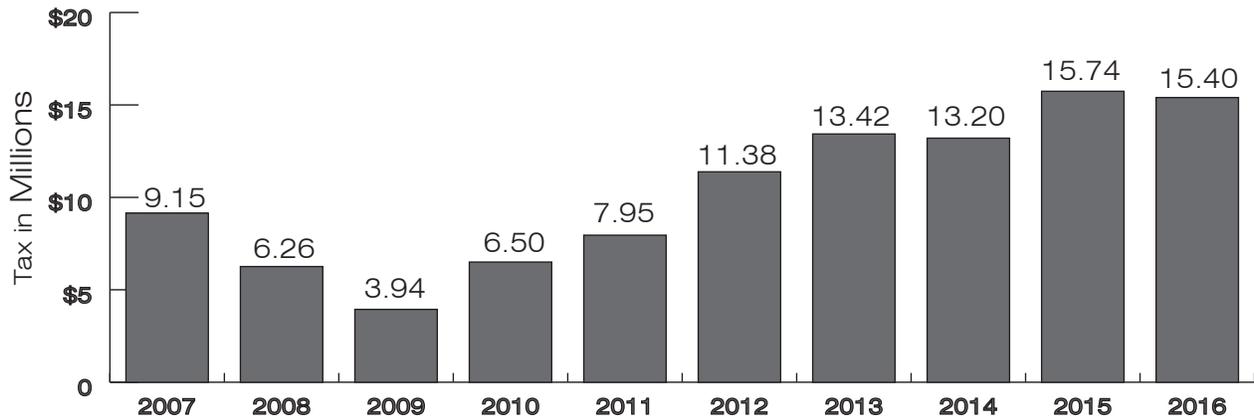
2016 Privilege and Adequate Facilities Tax Collections

\$15,398,948.00
Collected in 2016

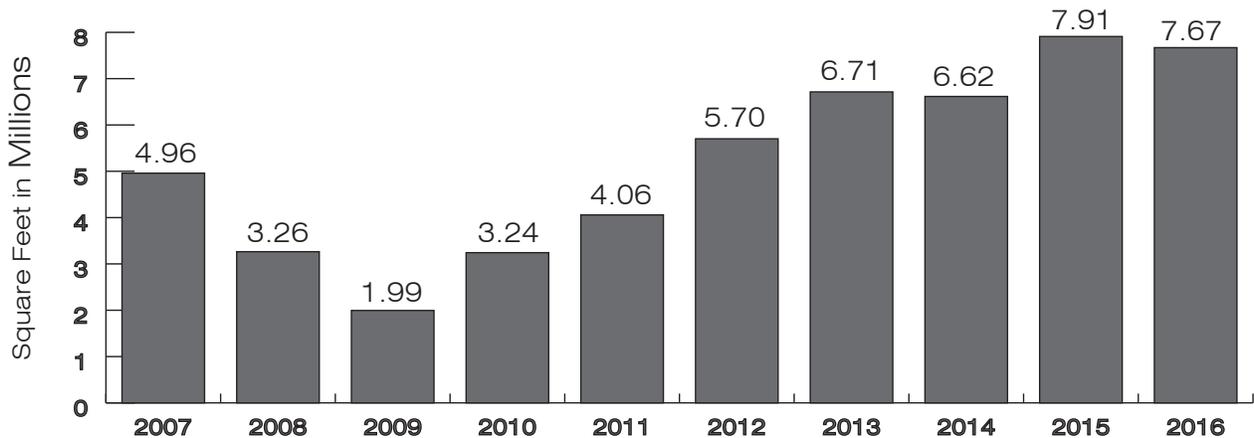


*There were no collections for County Commercial in 2016. Thompson's Station and Fairview were added in March 2017.

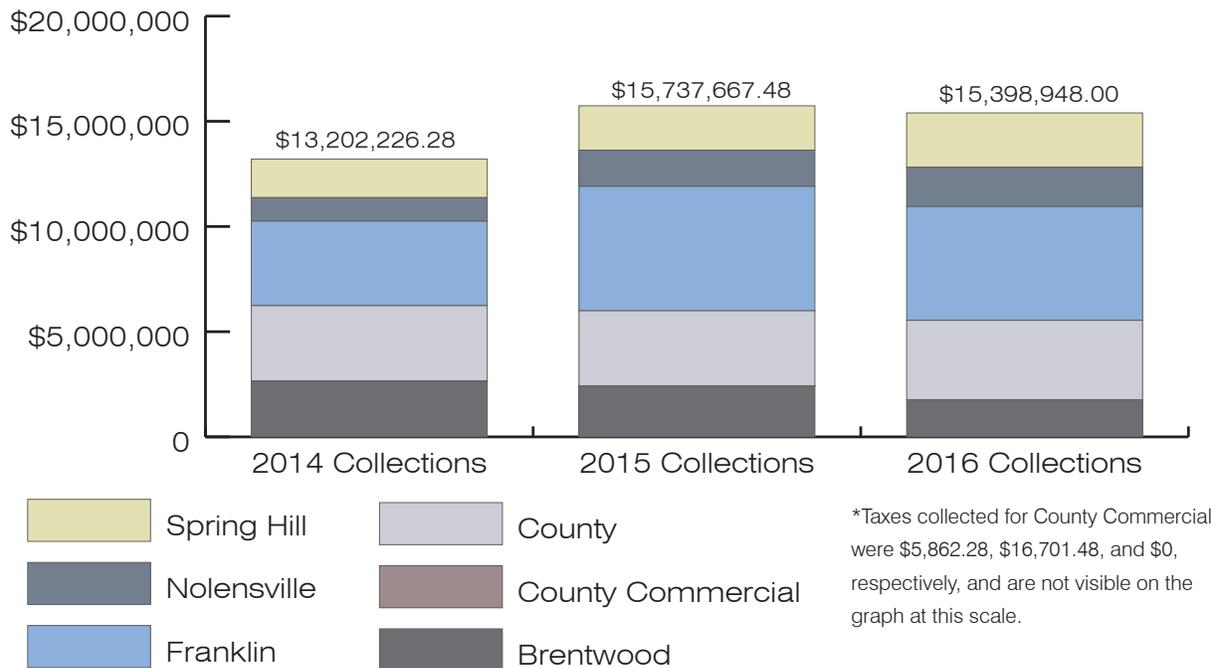
Privilege and Adequate Facilities Tax Collections



Privilege and Adequate Facilities Tax: Total Floor Area Taxed



Privilege and Adequate Facilities Tax Collection by City



Education Impact Fee

In November 2016, the Williamson County Board of Commissioners approved a resolution establishing an Education Impact Fee (EIF). The EIF is intended to offset the capital costs for schools to be constructed as a result of residential growth. As a result of this action, a clerical employee was added to the Building Codes Department in an effort to keep up with the increased daily workload.

Electrical Permits

Beginning in December 2010, the Building Codes Department commenced the sale of electrical permits. These permits are valid for all jurisdictions within Williamson County except the City of Franklin. The electrical inspections themselves will continue to be conducted by contract employees of the Tennessee State Fire Marshall's office. The addition of this service should offer further convenience to

those seeking building permits within the unincorporated County.

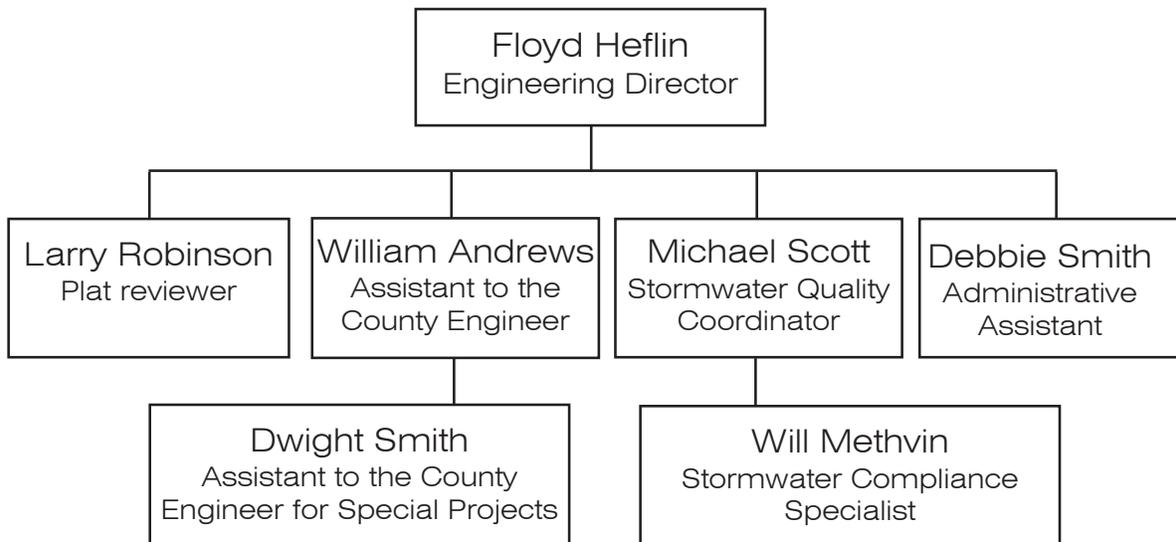
Department Goals for 2017

Construction of new homes county-wide has increased back to levels we saw in 2006, which is a great sign of recovery in economic stability for our County. In 2017, we will strive to continue a professional level of service to the building community while meeting Building Code requirements that are constantly changing due to Federal Government mandates, especially on the Energy Code. The State of Tennessee now mandates that all inspectors be certified in all areas of inspections performed. We strive to do more with less staff to save tax-payer dollars by having inspectors certified and licensed by the State in Building, Plumbing, Mechanical and Energy. Certification is renewable in 3-year periods by achieving 36 hours of State-approved continuing education in all areas of certification.

DEPARTMENT OF ENGINEERING

County Engineering works to maintain the quality of development in Williamson County while assisting developers and the general public in interpreting development regulations and implementing associated requirements. This Department is responsible for support to the County Commission, Storm Water Appeals Board, Highway Commission, Planning Commission, and other boards for the routine processes of administering and interpreting the Storm Water Management Regulations, Subdivision Regulations, Zoning Ordinance, FEMA (Federal Emergency Management Agency) Regulations, engineering practices, and for specific research as the need arises.

County Engineering is located in Community Development along with Building Codes, Codes Compliance, Sewage Disposal Management, and County Planning. Engineering activities are directed by Floyd Heflin, P.E., County Engineer, who is assisted by William Andrews, Dwight Smith, Michael Scott, Larry Robinson, Will Methvin and Debbie Smith.



Overview

The Engineering Department is an essential part of the Community Development team. One of the main duties of the Department is to review and approve all construction plans for new development. This review includes storm water quality requirements imposed by our Municipal Separate Storm Sewer System (MS4) permit with the Tennessee Department of Environment and Conservation (TDEC), Division of Water Resources. Delineation and platting of areas required for on-site sewage systems is also coordinated with Sewage Disposal Management. Letters of Credit for approved construction projects are estimated and established. When on-site storm water detention is neither possible nor practical for these developments, funds in-lieu-of detention may be levied, and placed in an account for use on community storm water management projects of greater magnitude. Surety for public improvements is reviewed and field inspections are performed on work in progress to assess compliance.

Other responsibilities vary from coordination of infrastructure testing and outside consultants, to assisting County residents with drainage and erosion control issues. Additionally, traffic and roadway issues, floodplain management, storm water enforcement, and various engineering-related concerns are addressed daily. The Engineering Department coordinates with the Highway Department, as required, concerning new development affecting County maintained roadways. Land Disturbance permits are also issued from the Engineering Department after review and approval of grading, drainage, and erosion control plans.

Surety

The Engineering Department establishes surety amounts for roads, drainage, and erosion control. Letters of Credit for new development are received at the final plat stage as required by the Planning Commission. Letters of Credit help insure proper performance during construction, and high infrastructure quality upon completion. Currently, the Engineering Department administers Letters of Credit totaling \$11,066,000 for roads, drainage and erosion control. In 2016, 2.788 miles of roadway, with an estimated construction cost of \$1,193,264, were released from surety and accepted by the Highway Commission and County Commission for addition to the County road system. William Andrews coordinates the assessment and review of infrastructure surety.

Land Disturbance Permits

Any activity disturbing one acre or more of land, or adding 10,000 square feet or more of impervious surface, must provide a site specific erosion control plan and obtain a land disturbance permit. Additionally, individual lots, which are part of a larger plan of development, are also regulated if the entire development disturbs one acre or more of land. During 2016, 338 permits were issued for individual lots at a cost of \$150 per permit, while 16 permits were issued for subdivisions or non-residential site plans at a cost of \$300 per permit. Total Land Disturbance Permit fees equaled \$55,500.

Floodplain Management

Williamson County participates in the National Flood Insurance Program (NFIP) as administered by FEMA. Currently mapped floodplains in the unincorporated County cover approximately 10,120 acres within which approximately 228 structures are located. The majority of those structures were constructed prior to the County's first Flood Insurance Study in 1981. Of those structures in the floodplain, only an estimated 17 homes are classified as repetitive loss structures. Repetitive loss structures are structures that have had two or more claims of \$1000.00 or more in a rolling 10 year period. During Williamson County's participation in the NFIP (since 1980), total paid losses have been \$7,296,779.58 through 11/30/2016. Most of these losses have occurred after the 2010 flood, prior to which the losses were approximately \$800,000. At the end of 2016, there were 563 policies in force representing \$165,616,000 in coverage.

The Engineering Department has represented the County in the Harpeth Basin Feasibility Study with the Army Corps of Engineers. The Corps approached the County and other potential local sponsors after the May 2010 flooding with the goal of updating hydraulics and hydrology for the entire Harpeth Basin. An interim report was generated in September 2015 that analyzed various alternatives for flood reduction in the Harpeth Watershed. While none of these alternatives met benefit cost criteria to warrant projects in the unincorporated County, the data generated will be used to reduce flood risk through

improved floodplain management tools. The County allocated \$50,000 in this effort, and worked with the Corps, the City of Franklin, the City of Brentwood, and Metro Nashville, Davidson County. Work performed under the Harpeth Basin Feasibility Study was also related to an updated Harpeth River study conducted by FEMA and its contractors. The original Harpeth River study was conducted in the late 1970's. The revised FEMA flood maps addressed areas of the Harpeth between the Franklin corporate limits and the Davidson County line. The revised maps became effective for insurance purposes on 12/22/2016.

As a result of the 11/12/14 Verification Visit by the National Flood Insurance Program (NFIP) Community Rating System (CRS) the County was upgraded to a Class 8 Community. The County's participation in this program allows a 10% discount on certain flood insurance premiums paid after October 1, 2015. The County receives CRS credit for maintaining a Multi-Hazard Mitigation Plan, performing community outreach to our repetitive loss areas, preserving floodplain as open space, and managing flood plain delineation and development. The Engineering Department works with Emergency Management to maintain a current mitigation plan so we will continue to be eligible for future grant opportunities. During 2016, outreach letters were sent to approximately 120 properties providing information on flood preparation, loss prevention, and response.

Stormwater Quality and Watershed Protection

Williamson County is required by the Tennessee Department of Environment and Conservation to have a Phase II National Pollutant Discharge Elimination System (NPDES) MS4 permit for storm water. Requirements of the permit include controlling construction site runoff and illicit discharges, and the County pays an annual permit fee of \$3,460. Other components involve public education, community involvement, and enforcement. While compliance is the goal of the program, \$68,500 in storm water penalties were collected during 2016.

Permit compliance is managed by Michael Scott who also coordinates the agenda of the Storm Water Appeals Board. This Board meets monthly as needed to hear appeals of the Storm Water Management Regulations. Seven appeals were heard in 2016 representing \$700 in application fees. An additional seven appeals were made to the County Engineer.

Williamson County has performed stream monitoring on impaired waters that are referenced by TDEC's 303d list as possibly impaired from MS4 discharges. So far, chemical and/or biological samples have been taken on the Harpeth River, Little Harpeth River, Rutherford Creek and Owl Creek. The goals of the sampling activities are to assist in determining the health of the waterways by monitoring various indicators over time.

As part of our storm water public education and outreach, Williamson County has developed a "Guide to Waterway Natural Areas" which explains our stream buffer requirements, and was distributed to

property owners along portions of impaired streams. Additionally, Williamson County conducted a public stream clean-up on the Harpeth River. Other educational outreach activities include:

- Participation with the City of Brentwood in an annual event to educate local high schools about storm water related topics,
- Public Service Announcement broadcasts,
- Maintaining storm water information on the County website.
- Additional Storm Water Quality Control activities performed include:
- Implementation of new State Runoff Reduction standard for water quality at new developments,
- Pollution prevention and good housekeeping inspections at County facilities/operations,
- Dry weather screening of the County's storm sewer systems,
- Maintaining GIS inventory of active Land Disturbance Permits and post construction BMPs and tracking compliance.

Blasting Information

Although no permit is issued by the County, applicants are asked to disclose the purpose and extent of blasting activity, when the blasting will occur, and how the blasting will be supervised. Relevant safety measures required to protect the surrounding property owners from sustaining damages should also be discussed. The applicant is also required to provide this office with a certificate of insurance stating the extent of their coverage. Blasting is regulated by the State Fire Marshall's Office.

Department Goals for 2017

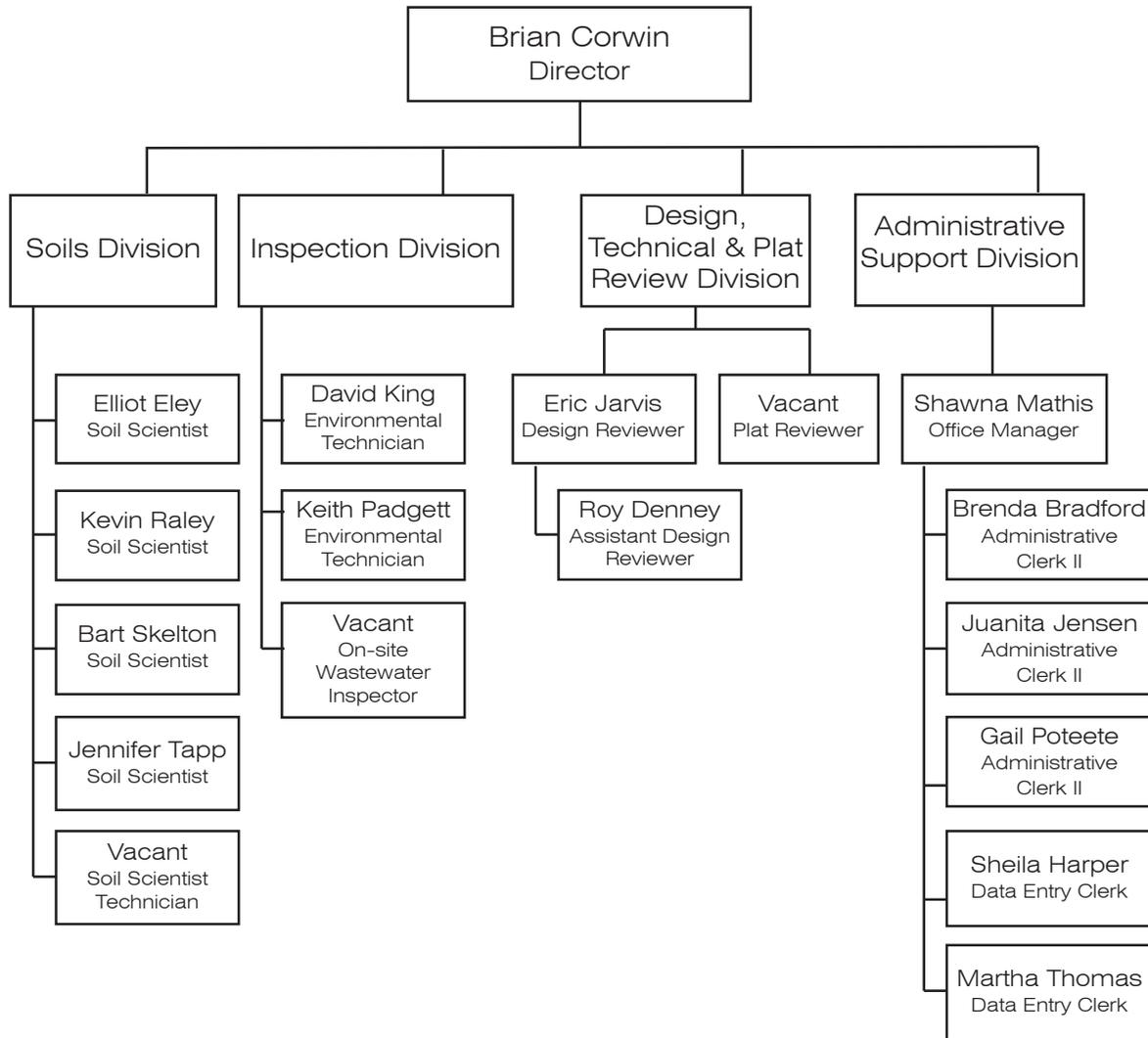
As always, it is the desire of the Engineering Department to continue working in a cooperative effort with other Departments, elected officials, and County residents to promote and protect the health, safety, and welfare of all citizens and to enhance the environment and infrastructure of Williamson County. Specifically, we will continue to improve our Water Quality program utilizing data from our sampling and analysis program as required by our State permit. We will further our efforts to provide premium discounts for the residents of Williamson County under the Community Rating System by continued application of our flood plain requirements, and will utilize more accurate hydrologic information on the Harpeth River watershed through our participation in the Harpeth River Feasibility Study. Engineering, and Community Development as a whole will also be working to improve our application, plan review, and inspection processes through the implementation of a new software systems. This system will allow online submission and review of plans for most applications processed by Community Development. It will include the ability to issue and pay for permits over the internet, making the review process much more convenient for applicants.

DEPARTMENT OF SEWAGE DISPOSAL MANAGEMENT

The Department of Sewage Disposal Management is charged with the task of ensuring that the laws of Williamson County regarding the use and placement of individual, on-site subsurface sewage disposal systems (i.e., septic systems), are fairly implemented and enforced so as to protect the health and well-being of the general public, irreplaceable groundwater and surface water resources of the County, and quality of the environment which the citizens of the County enjoy.

The Department is empowered to regulate subsurface sewage disposal in accordance with Tennessee Code Annotated Title Sixty-Eight, Chapter Two Hundred Twenty-One, Part Four. In January of 1993, pursuant to provisions outlined in said code, Williamson County chose to enter into and executed an agreement (i.e., contract) with the Tennessee Department of Environment and Conservation (TDEC) to implement the provisions of this part of the state code in its area of jurisdiction. Additionally, the Department is governed by the Board of Health of Williamson County. The ten members of the Board of Health have the power to promulgate all regulations, rules and policies of the Department, and grant variances of such rules when deemed appropriate and necessary.

Our office is located on the fourth floor of the Williamson County Administrative Complex in Suite 411. Brian K. Corwin is the Director and is assisted by Office Manager, Shawna Mathis. The Department staff is divided into four groups: Soil Scientists, Inspectors, Design and Plat Review, and Administrative Support.



Williamson County Government has jurisdiction over all proposed or existing septic system installations within the boundaries of Williamson County. In addition to the lands governed by the County, this jurisdiction also includes all land areas contained within the boundaries of the incorporated cities and towns which lie within the County. Thus, the Department of Sewage Disposal Management is the agency charged with the implementation, interpretation, and enforcement of the regulations. In addition to the State of Tennessee's Rules of the Department of Environment and Conservation, Division of Water Resources (TDEC-WR); Chapter 0400-48-01: Regulations to Govern Subsurface Sewage Disposal Systems, the County adopted its own set of rules in May, 2000. Effective in October of the same year, the Regulations Governing On-Site Sewage Disposal Systems of the Williamson County Department of Sewage Disposal Management are no less stringent, and in many respects are more stringent, than the state regulations.

Department Overview and Quantitative Data

In order to carry out our mission, the Department is directly involved and oversees every aspect associated with on-site subsurface sewage disposal within the County limits. This “cradle-to-grave” approach begins with the earliest phases of property development, continues through final system installation and on throughout the life of the system. The implementation of this process encompasses much more than simply permitting systems. It involves every aspect associated with the permitting process and in essence has evolved into a form of quality control to ensure the protection of public health and the environment with regard to sewage disposal. These Departmental responsibilities and processes, and their statistics, are further explored in the following paragraphs.

Board of Health Members

The Williamson County Board of Health is composed of ten members including Chairman and County Mayor Rogers Anderson, Dr. Charlie Beauchamp, Cathy Montgomery, Cyndy Howes, Martin Myers, III, Dr. Gary Owen, Rhonda Watson, Dr. C.A. Stillwell, Jorja Trocino, and Dr. Joseph Willoughby.

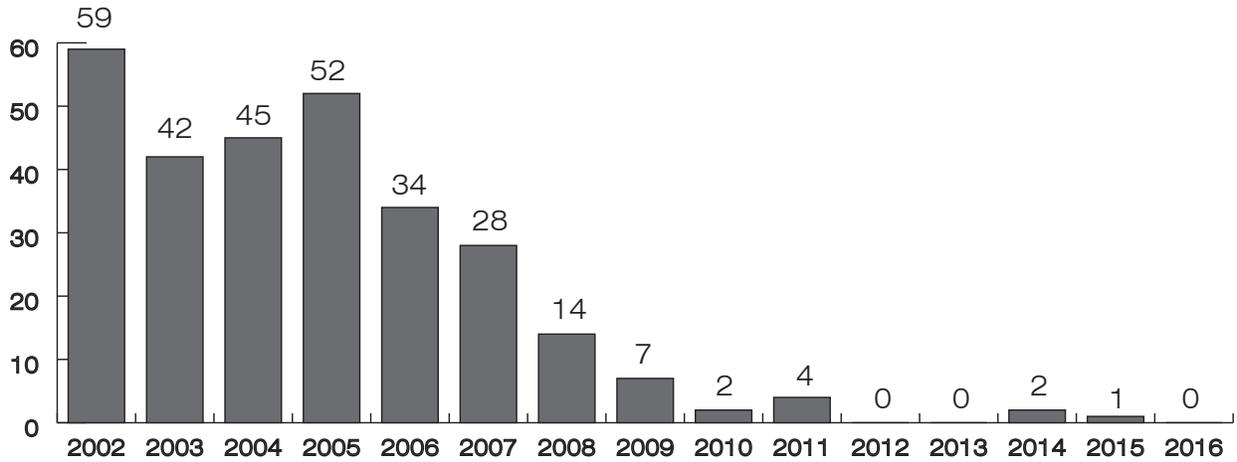
Soil Assessment

Soil assessment involves the processes, practices and techniques utilized to evaluate the soils on a parcel of land to determine whether or not those soils will support the installation of a subsurface sewage disposal system. These soil assessment methodologies include soil mapping, percolation tests and general soil surveys. The Department’s soil scientist staff manages this aspect of the program. Part of this responsibility includes the review and approval of all soil maps and percolation tests submitted by independent consultants for conformance with the regulations, as well as with accepted soil science standards.

Property Development

Utilizing the soil assessment information, a land parcel can then be evaluated for suitability for the use of subsurface sewage disposal systems. Department staff oversees this process for both platted and un-platted parcels of land. This involves working with independent consultants (e.g., surveyors, engineers, etc.) on everything from lot configuration, to the determination of system type, to area sizing and setback requirements, among a multitude of other things. These responsibilities include the review and approval of subdivision plats (and their revisions) for adherence to all applicable laws and regulations.

Percolation Test Submittals



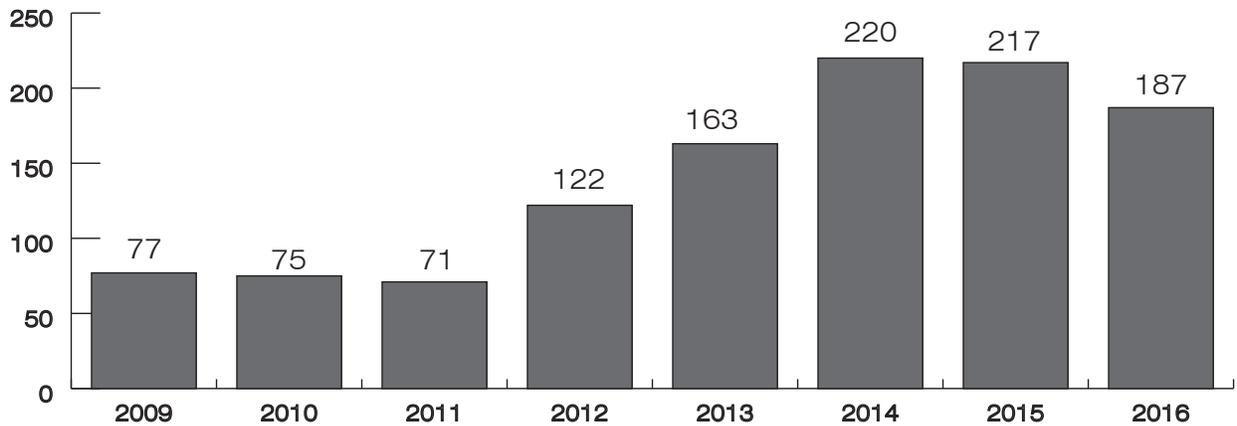
Percolation Tests

Although much more sophisticated and accurate methodology is available for soil evaluation, percolation tests are still accepted in limited situations for property development. In 2015 and 2016, a total of one (1) such test was conducted.

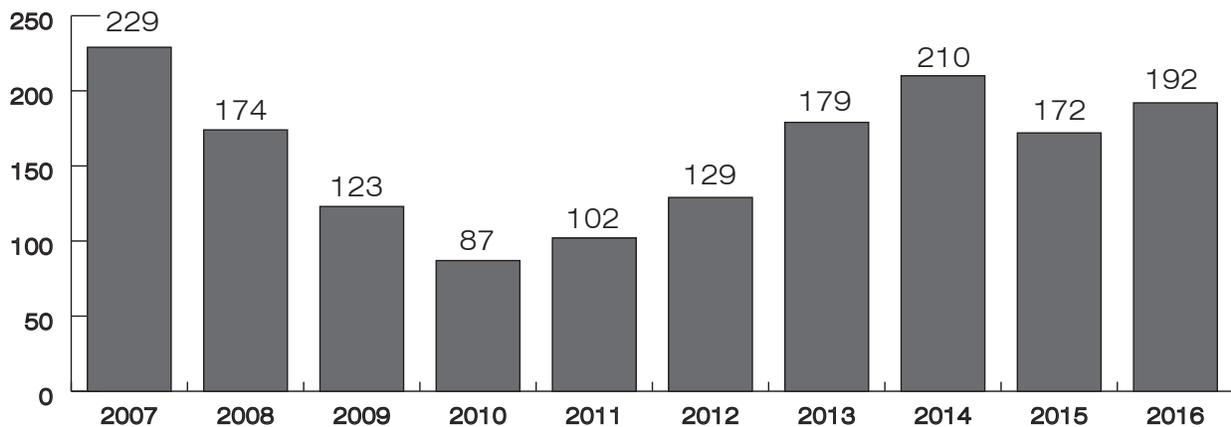
Soil Maps

Responsibilities of Department Soil Scientists also include on-site verification of soil maps submitted by private soil consultants. In 2016, Department staff verified 187 soil maps, a decrease of 13.8% to 2015. The following graph offers a historic perspective.

Soil Map Submittals (Verifications)



Plat & Subsurface Sewage Disposal Location Map Submittals



Subdivision and SSDS Location Maps

Any proposed subdivision of land which requires the use of subsurface sewage disposal systems, or any individual lot of any size which requires location of suitable septic areas in order to be deemed buildable, must be reviewed and approved by the Department. The resulting Subdivision Plat (which also requires concurrent review and approval by the Planning Department), or Subsurface Sewage Disposal System Location Map, must be recorded in the Register of Deeds Office before Permits for Construction of Subsurface Sewage Disposal Systems can be issued.

In 2016, the Department collected \$37,500 in review fees. Those fees represent 192 Final Plat and Subsurface Sewage Disposal System Location Map submittals, containing 300 individual lots. This represents a 15% increase in submittals in 2016, and a 50% increase in the number of lots reviewed. The Department collected \$25,000 in review fees in 2015. Those fees represent 172 Final Plat and Subsurface Sewage Disposal System Location Map submittals. These statistics do not include

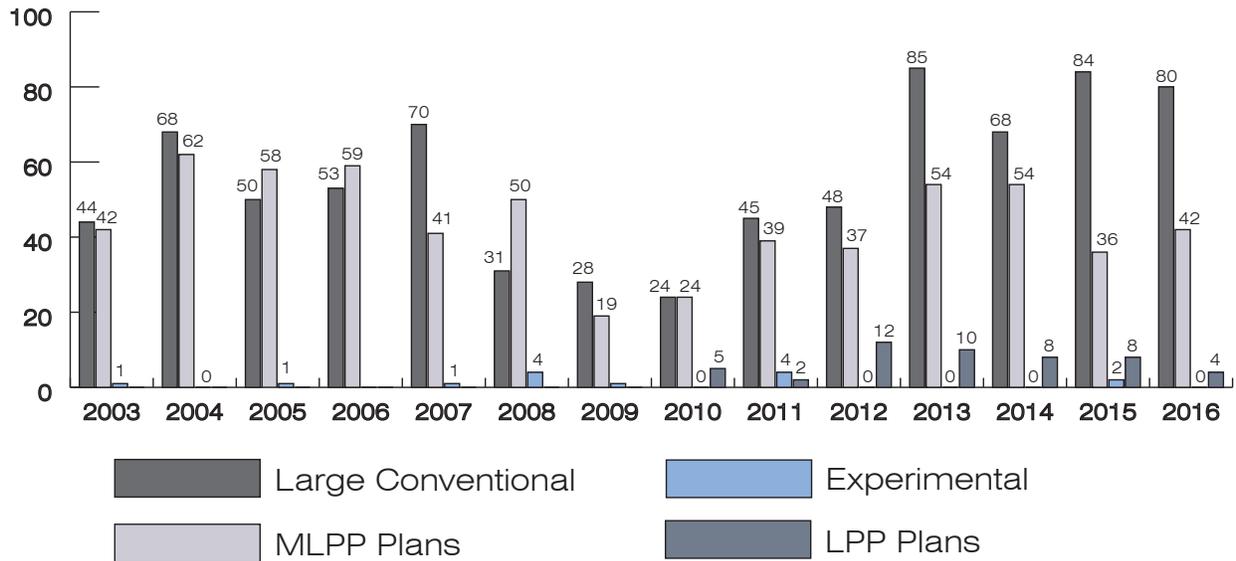
Preliminary Plat reviews, Sketch Plan reviews, or reviews of re-submittals required to rectify errors and omissions.

Alternative & Experimental System Designs

All alternative and experimental on-site wastewater systems are required to be designed by a licensed engineer. The Department's design review staff oversees the review and approval of all system design plans for conformance with the regulations, as well as with accepted engineering practices and standards.

Three types of alternative systems are utilized in Williamson County; standard Low Pressure Pipe (LPP) systems not requiring soil modification; Modified Low Pressure Pipe (MLPP) systems requiring soil modification; and Mound systems. The use of experimental systems is rare and restricted to repair purposes only, where proper soil conditions do not exist for installation of a code compliant system. In addition, conventional systems serving structures with a wastewater flow in excess of 750-gpd are considered "large" conventional systems, and must be designed by a licensed engineer.

Subsurface Sewage Disposal System Design Plans Reviewed



The Department reviewed 126 system design plans in 2016, a 3.1% decrease to 2015's 130. Of the 126 reviewed this year, 80 were LPP systems, 42 were MLPP systems, and 4 were large conventional systems. No experimental system design plans were submitted in 2016.

In 2015, the Department reviewed 130 system design plans. Of the 130 reviewed, 84 were LPP systems, 36 were MLPP systems, 8 were large conventional systems, and 2 were experimental systems.

Construction Permits

The Department not only issues permits for the construction of new subsurface sewage disposal systems, but also for the upgrade or enlargement of existing systems, and the repair and/or replacement of malfunctioning and failing systems. In addition to the above-noted processes associated with permitting new

systems, Department personnel are also involved with the evaluation of individual site plans and building floor plans to ensure that a proposed structure is in compliance with applicable rules, regulations and approvals. For existing systems that are

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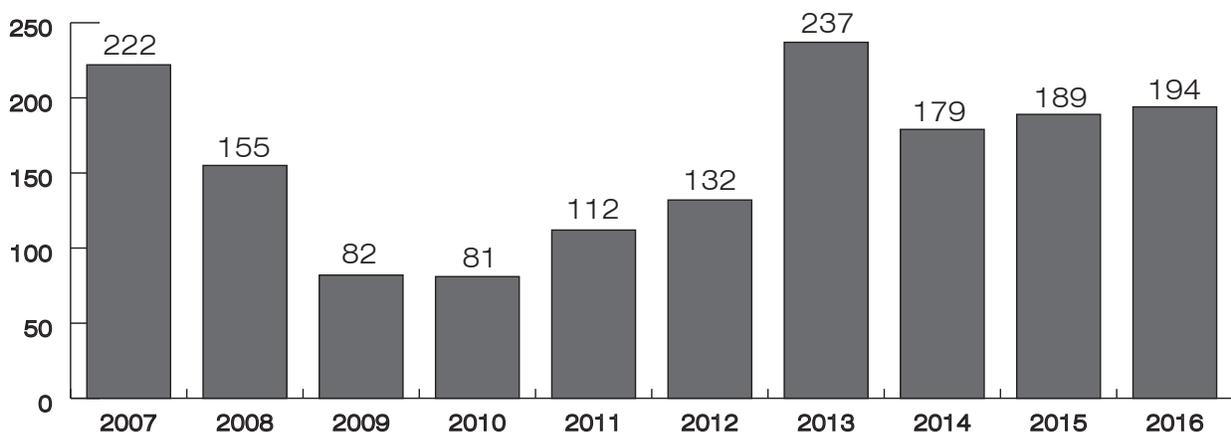
Anyone constructing, altering, extending, modifying, or repairing, either alternative or conventional subsurface sewage disposal systems within Williamson County, must hold a valid Construction Permit issued by the Department. The recipient of a Permit for Construction of a system (i.e., the property owner or builder) is held responsible for adhering to the construction requirements of the Regulations. According to the fees collected, the Department issued 194 new construction permits in 2016, a 2.6% increase from the previous year. In 2015, new construction permit activity (189 total permits) increased 5.6%, from 179 in 2014.

Through a series of steps, the Department determines the type of septic system that is appropriate for use with the construction of a new structure, and for expansion or modification of an existing structure. System type is determined by the soil conditions of the property, number of bedrooms in the structure, and whether or not oversized bathing fixtures will be included in residential construction; commercial structures are evaluated by conventional septic system construction

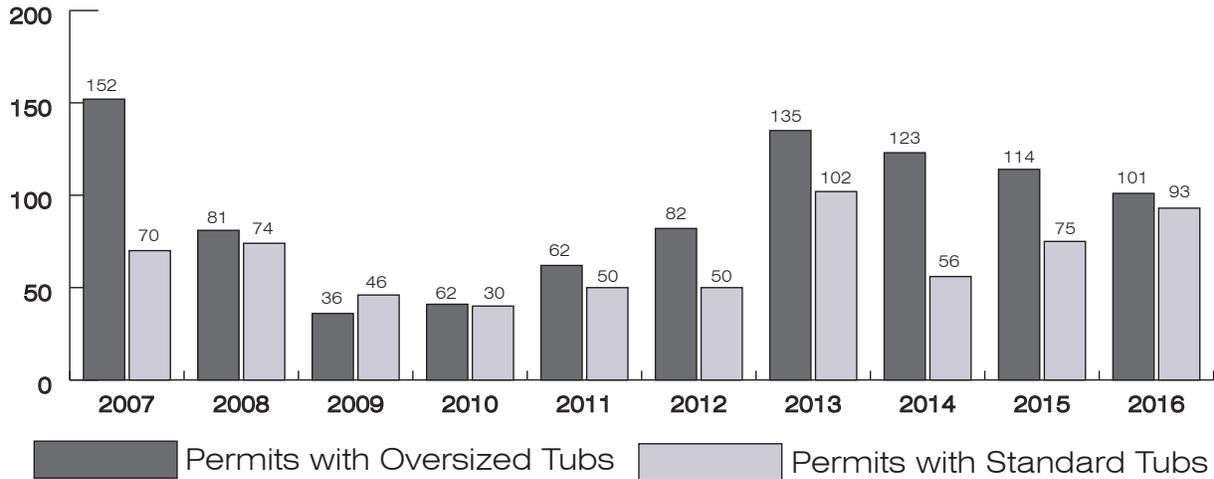
proposed use and other factors. New The majority (52.1%) of new construction permits issued in 2016 included oversized Jacuzzi or garden tubs. 60.3% of new construction permits issued in 2015 included oversized Jacuzzi or garden tubs.

The Department has authority as well over the repair of existing systems, which may be required for a variety of reasons including upgrading non-conforming systems due to remodels and expansions of structures, and repairing failing systems which may be a threat to public health and or the environment. According to fees paid in 2016, 206 repair permits were issued, a 9.0% increase from 2015. Of those 206, 174 (84.5%) were issued to repair failing systems, and 32 (15.5%) were issued for other reasons. Ninety-two (52.9%) of the repair permits issued for failures were for Conventional systems, sixty-three (36.2%) were for LPP systems, and nineteen (10.9%) were for MLPP systems. Of repair permits that were issued for other reasons, 22 (68.8%) were for Conventional systems and 10 (31.2%) were for LPP systems.

New Septic System Construction Permits



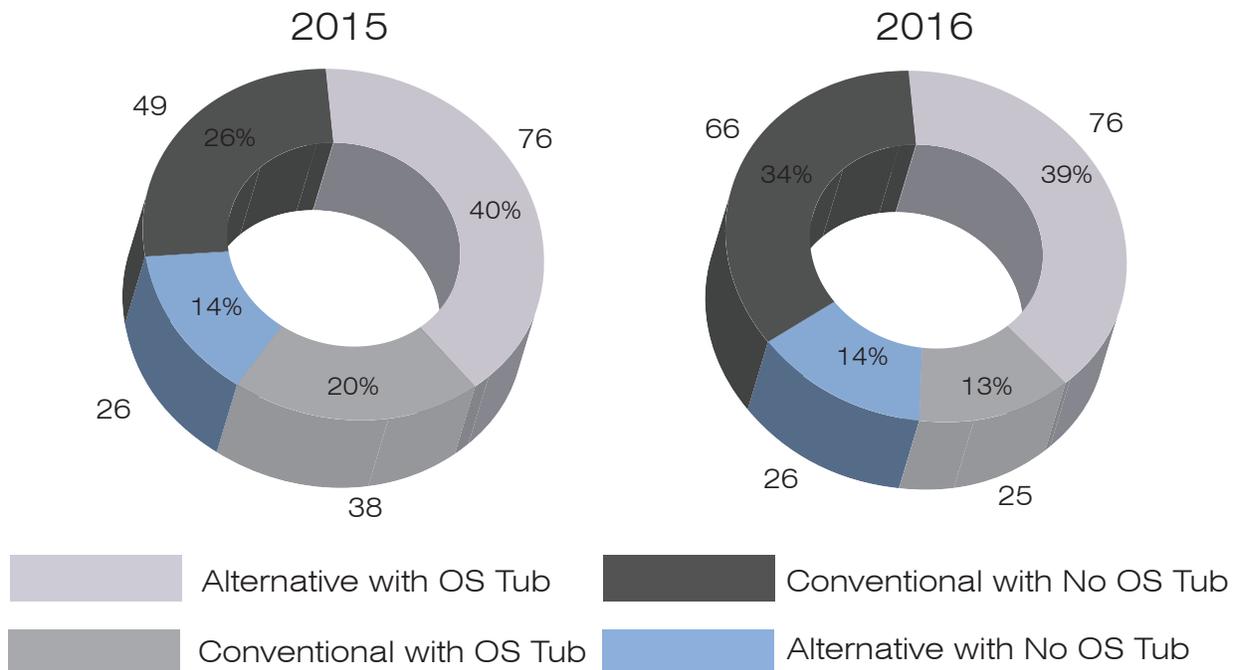
New Construction Permits Issued with Oversized & Standard Tubs



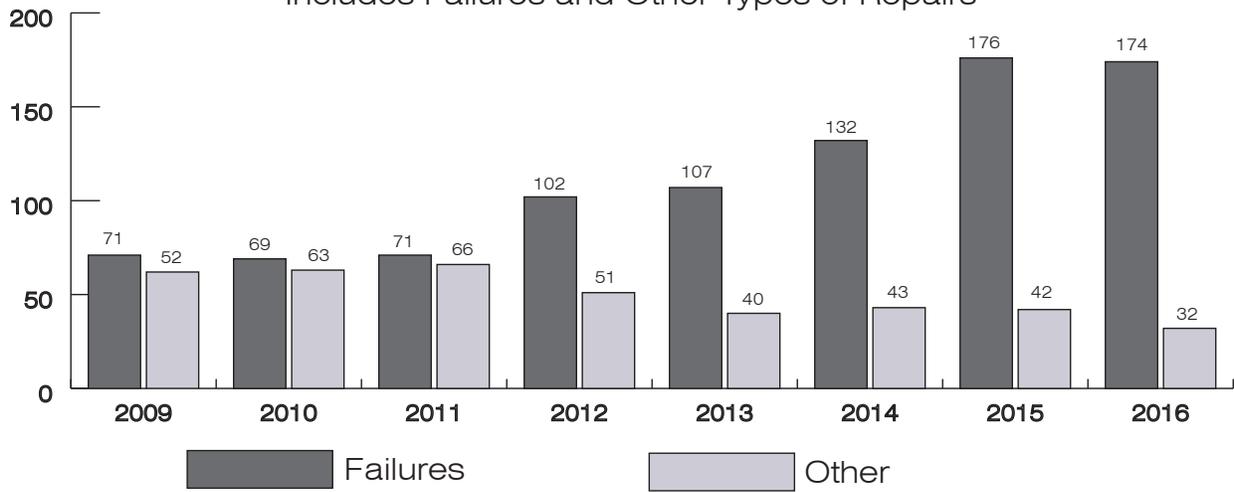
In 2015, 218 repair permits were issued, a 24.6% increase over 2014. Of the 218 permits issued, 176 (80.7%) were issued to repair failing systems, and 42 (19.3%) were issued for other reasons. Ninety-seven (55.1%) of the Repair Permits issued for failures were for Conventional systems,

sixty-three (35.8%) were for LPP systems, and sixteen (9.1%) were for MLPP systems. Of the 42 Repair Permits issued for other reasons, 28 (66.7%) were for Conventional systems, 8 (19.0%) were for LPP systems, and 6 (14.3%) were for MLPP systems.

Annual Comparison of New Construction Septic System Permits



Septic System Repair Permits Includes Failures and Other Types of Repairs



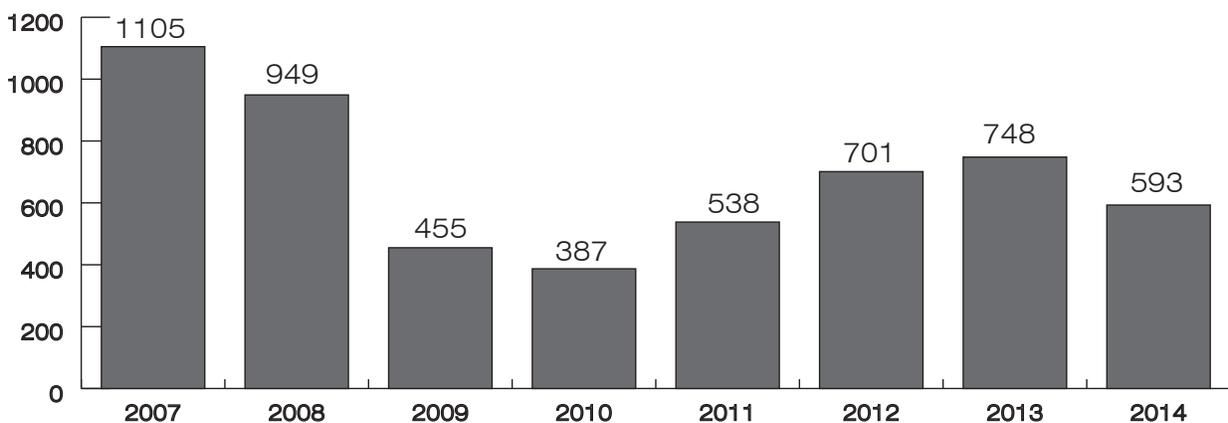
System Inspections

During the actual installation of new systems and the repair, modification or upgrade of existing systems, the Department’s inspection personnel oversee all construction related activities. System installations must be supervised from start to finish and the County Regulations detail a very rigorous inspection process at various stages throughout the installation to ensure adherence to all applicable regulations, permit details and construction standards. The number of inspections required depends upon the complexity of the system or repair. Due to errors discovered when compiling this

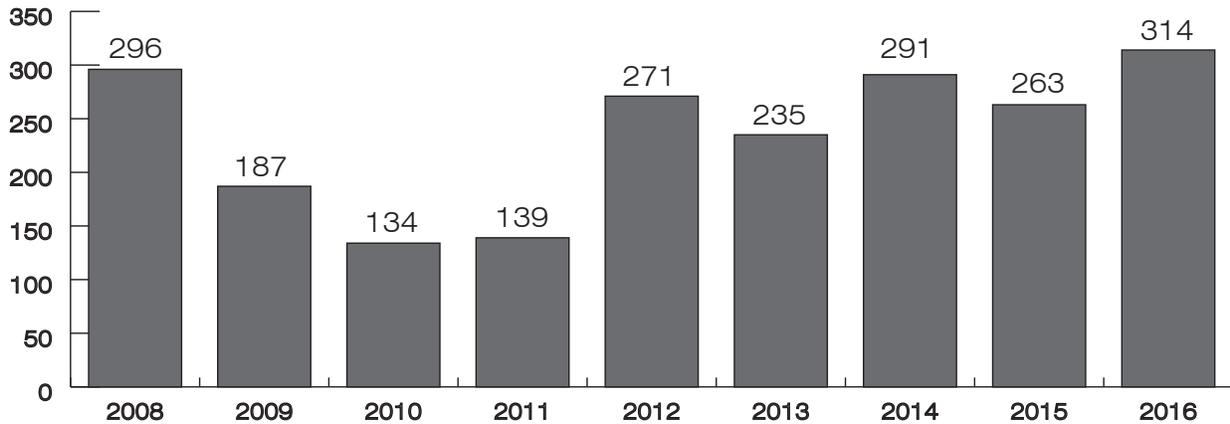
report, accurate inspection request data is not available for 2015 and 2016. See chart for prior years’ activity.

After all inspections are completed and final approval is granted to a system installation, whether new or repaired, the Department will issue a Certificate of Completion. The Department issued approximately 314 Certificate of Completions in 2016, which is a 19.4% increase over the previous year. In 2015, approximately 263 Certificate of Completions were issued by the Department. Only after issuance of such certificate may a property owner receive a Certificate of Occupancy for that structure from the Building Codes Department.

Total Septic System Inspection Requests



Certificate of Completions Issued



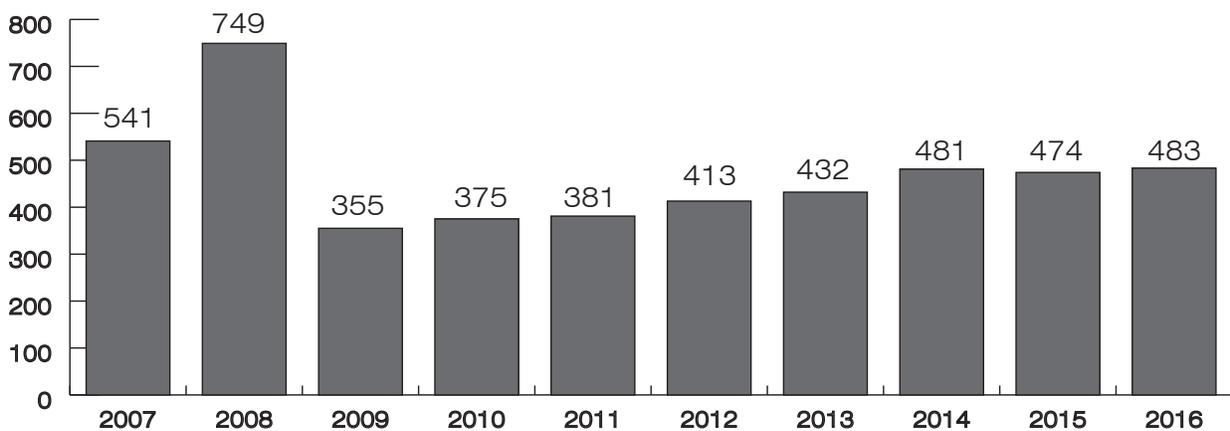
Other Department Services

Any modification to a property serviced by a subsurface sewage disposal system in Williamson County automatically triggers the completion of a Technical Assistance Application with the Department, an on-site inspection by a Department staff member, review of pertinent documentation, and approval by the Department, whether or not an actual septic permit is required.

Typical modifications include projects such as swimming pools, attached or detached garages, out buildings (e.g., sheds, barns, etc.), sunrooms, patios, decks, porches, and other minor external or internal remodeling or cosmetic improvements.

The Department processed 483 Technical Assistance Applications in 2016, a 1.9% increase over 2015. In 2015 the number

Technical Assistance Applications



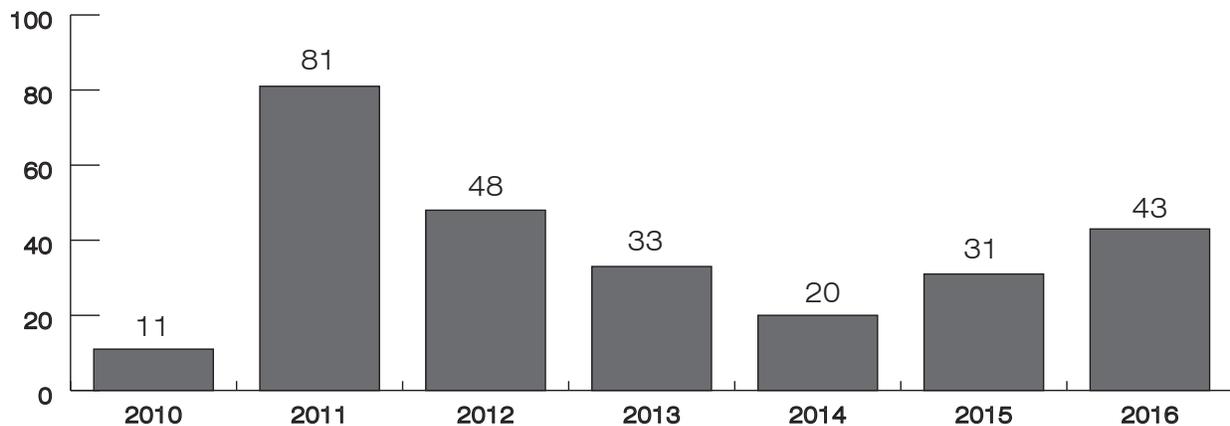
Included in the Technical Assistance group are two community services the Department provides for the convenience of the public. One of these, system recertification, has become increasingly important in the past few years because of recent state legislation placing liability on realtors, or sellers of real estate, for the misrepresentation of compatibility of a home's size (i.e. number of bedrooms) with its septic system permit restrictions. However, the Department only received 3 Recertification Applications in 2016, which was a decrease of 77% to the 13 Recertification Applications received in 2015.

The second service, collecting and processing water samples for the purpose of identifying various contaminants in wells, springs and other private drinking water sources, requires the on-site collection of a sample by a Department Inspector.

Processing of the specimen is completed by a state laboratory within seven to ten days, which is followed by written notification of the results to the applicant. One water sample was requested in 2016. No water samples were requested in 2015.

The Department provides a number of services that do not have fees directly associated with them. Sometimes these services are requested as a result of natural phenomena. Homeowners who have suffered losses due to fires, floods, or tornadoes are not charged fees to process permits to repair or rebuild their homes. Since the February 2008 tornado, the number of applications for reconstruction due to storm damage has steadily decreased each year. In the years 2015 and 2016, no such request was used. Additionally, four (4) and ten (10) fire damage-related applications were processed in 2015 and 2016, respectively.

Tank Abandonments

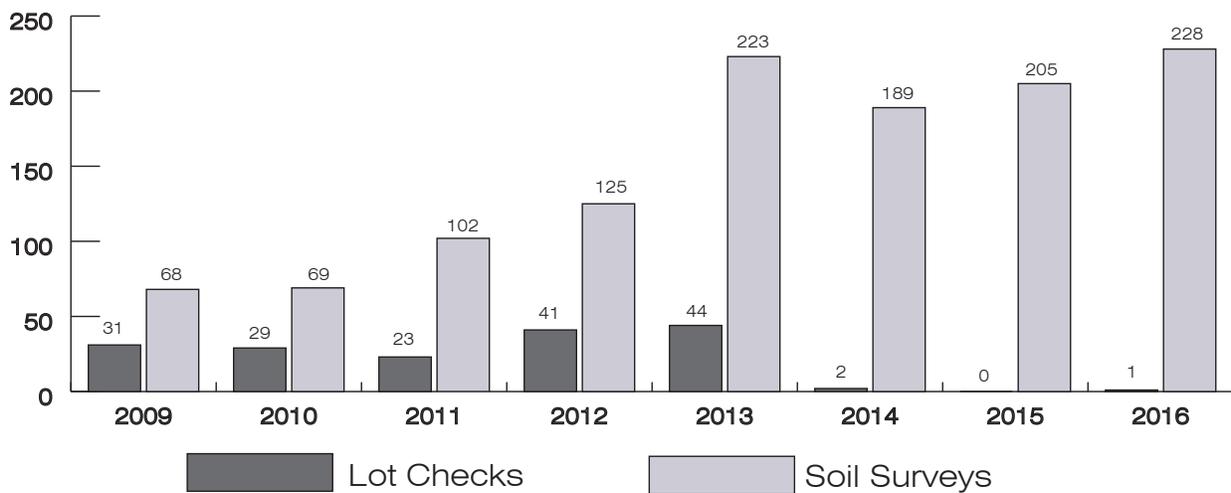


Homeowners hooking to sewer and abandoning their septic systems must comply with County Regulations specifying the manner in which the tank is rendered unusable, in order to address public health concerns. Although verification of proper abandonment procedures is required, no fees are assessed to homeowners for inspections of abandoned tanks. In 2016, approximately 43 tank abandonments were inspected by the Department, a 38.7% increase over the 31 tank abandonments inspected in 2015. Of the 43 tank abandonments of 2016, 7 were attributed to the joint Williamson County/ City of Franklin project begun in 2009 to extend sewer to the Grassland and

Meadowgreen areas. In 2015, 14 of the 31 tank abandonments were due to the same project.

Finally, lot checks, flagging of existing systems, field sketches of sites, etc., are services often required during the review of Plats or SSDS Location Maps; and, soil surveys are performed by the Department for landowners who meet certain criteria and want to build residences for themselves on their own properties. Fees for these services are not charged individually, but rather are included as a portion of permit or plat review fees. The Department completed approximately 228 lot checks in 2016 compared to 205 in 2015.

Soil Surveys and Lot Checks Completed



Pumpers

The Department has regulatory authority over all septic tank pumping contractors conducting business in Williamson County. This includes the permitting of individuals allowed to conduct such operations as well as oversight to ensure the proper disposal of all collected septage. Although the Department does not require a separate County license for pumping contractors to

operate in Williamson County, they are required to provide the Department with a valid copy of their state Septic Tank Pumper Permit issued by the Tennessee Department of Environment and Conservation, Division of Water Resources (TDEC-WR). Additionally, they are required to file with the Department a valid copy of their Wastewater Discharge Permit for Wastewater Haulers with a wastewater treatment facility approved by TDEC-WR.

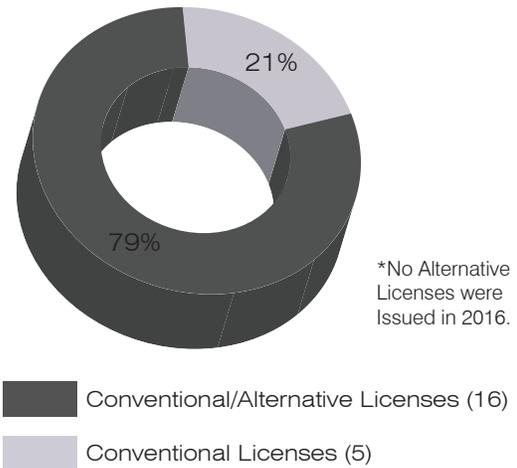
Licensing of Septic System Installers

Construction, modification, or repairs of subsurface sewage disposal systems within Williamson County may only be conducted by persons holding valid installers' licenses and identification cards issued by the Department of Sewage Disposal Management. The Department issues three types of installer licenses: Conventional, Alternative, and Conventional/Alternative. Persons wishing to be licensed in Williamson County must:

- Obtain the corresponding licenses through the Tennessee Department of Environment and Conservation, Division of Water Resources (TDEC-WR);
- Provide a Letter of Credit or Surety Bond;
- Pay an annual license fee;
- Demonstrate thorough knowledge and understanding of the Department's Regulations Governing On-Site Sewage Disposal Systems; and
- Successfully complete a probationary period under the direct supervision of the Department.

Installers must renew their licenses with TDEC-WR and the Department annually. In 2016, 24 installer licenses were issued, of which five were conventional only, and 19 were conventional and alternative combined. In 2015, 24 installer licenses were issued. Six of these were conventional only and 18 were conventional and alternative combined.

Septic System Installer Licenses Issued in 2016



Miscellaneous

The Department also has regulatory authority over all product and technology approvals proposed for use in conjunction with on-site wastewater systems in Williamson County. Department staff reviews such proposals on an individual, case-by-case basis.

Department Goals for 2017

Staff will begin work in earnest on the Small Business Waste Water Task Force (SBWWTF) findings. This group of community leaders worked with staff to develop recommendations to assist small commercial businesses overcome obstacles to waste water treatment.