

ENGINEERING

Description of Operations

The Engineering Department/City Engineer is responsible for anything located within the City right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. The right-of-way is intended for public uses such as roads, utilities (both public and private), clear zones for traffic safety, sidewalks, bicycle lanes and trails, drainage facilities, signage and access between property and the roadway system.

The Engineering Department is comprised of four individual programs: Administration, Transportation, Construction and Design.

The Administration Program provides leadership, direction and support to all Engineering Department activities through switchboard and reception, clerical assistance, human resources related activities, visual display materials, coordination of meetings and dissemination of information related to projects and services, processing of all departmental expenditures, preparation and maintenance of the Engineering Department budget, preparation of City Commission agenda related materials, and ensuring that the items are placed on the City Commission agenda, along with analysis of operating and capital projects, and the processing of all related expenditures.

This program is also responsible for the maintenance and processing of all paperwork necessary to collect revenues from various local, state and federal agencies for construction projects or interlocal agreements, as well as applying for grants and disaster assistance.

The Transportation Program plans and develops projects prior to being incorporated into the Capital Improvement Program, a program which is developed by the City's Finance Department and approved by the City Commission that includes all City projects that are either funded or scheduled for construction in the next 10 years. This program measures the impact of developments throughout the City by reviewing and determining if a project is de minimus or if a traffic study is required. Review of transportation concurrency and traffic circulation reports for compliance with the applicable criteria of the City Code, design of City infrastructure related to transportation improvements on roadways, implement, operate and maintain the City's computerized multi-arterial traffic control system, maintain and operate the City's traffic count program, and investigate the feasibility of installing traffic signs and pavement markings so the general public has a safe, efficient flow, and convenient transportation system on City maintained roadways.

Traffic calming is a part of this program and is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street use. There is a process established for the Traffic Calming Program and as a result of that process a traffic calming plan may be approved and subsequently the project will be designed, bid and constructed.

The Engineering Construction and Inspection Program is responsible for permitting (sidewalk cafes, valet parking, encroachments, driveways, right-of-way use and newsracks), inspection, planning, design and monitoring of the various uses of the right-of-way.

This program also provides full time construction inspection during Engineering Department initiated construction projects and for other departments when necessary. This includes coordination with the public, other City departments and utilities during the construction project, evaluation of pay requests, field directives, and change orders when necessary and final project acceptance.

The Engineering Planning and Design program endeavors to provide well planned, City Code compliant infrastructure improvement projects through timely and concise design (accomplished internally or externally) and code compliance development plan review (public and private development projects). To help facilitate the project design, the Engineering Department has developed and maintained the Engineering Design Criteria Manual (EDCM) for use on all design projects, both public and private, within the City limits.

This program includes the design of projects with in-house staff, as well as the selection process to hire engineering consultants, perform contract negotiations and management of the consultant through the design process.

ENGINEERING

Department Expenditures by Cost Center

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
028621 ADMINISTRATION	166,236	171,566	177,582	0	177,582
028622 TRANSPORTATION	315,660	386,062	262,920	0	262,920
028623 CONSTRUCTION INSPECTION/ADMINIS'	172,423	144,488	264,093	0	264,093
028624 DESIGN	204,243	201,026	262,258	0	262,258
Totals	\$858,562	\$903,142	\$871,528	\$0	\$966,853

Department Expenditures By Category

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
Personal Expenditures	766,686	839,284	868,143	0	868,143
Non Personal Expenditures	59,510	63,858	97,610	0	97,610
Capital Expenditures	32,366	0	1,100	0	1,100
Totals	\$858,562	\$903,142	\$966,853	\$0	\$966,853

Personnel Summary

Actual Positions	17.00	0.00	17.00
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Revenue Summary

	Total
LICENSES & PERMITS	78,720
INTERGOVERNMENTAL	54,622
CHARGES FOR SERVICES	750
OTHER MISCELLANEOUS REVENUES	250
INTRAGOVERNMENTAL SERVICES	121,375
	\$255,717

ENGINEERING ADMINISTRATION

Description of Operations

The Administration cost center provides leadership, direction and support to all Engineering Department activities.

This cost center is responsible for the preparation and maintenance of the Engineering Department budget, preparation of purchase orders, expenditure vouchers and travel arrangements, along with analysis of operating and capital projects, and the processing of all related expenditures.

This cost center is responsible for preparing all City Commission Agenda related items, and ensuring that the item is placed on the agenda.

This cost center prepares the project specification manual and plans for projects that will be sent out for bid; as well as conducts, schedules, and transcribes minutes of the pre-bid and pre-construction meetings. The Administration works closely with the Purchasing Department in ensuring that all bond requirements are met and proper paperwork has been received by contractors prior to them being issued a Notice to Proceed to commence work.

This cost center also manages all incoming and outgoing correspondence as well as management of the departmental filing system.

This cost center also provides support through switchboard and reception, visual display materials, coordination of meetings and dissemination of information related to projects and services.

This cost center is responsible for maintenance and the processing of the necessary paperwork required in order to collect revenues from various local, state and federal agencies for construction projects and/or any agreements the City has entered into.

All Engineering Department employee related activities are maintained by this cost center. These activities consist of preparing and processing of employee evaluations, recruitment and disciplinary actions, payroll and other human resources related actions.

Goal - Responsible City Government

To monitor and maintain the department budget and to provide quality customer service.

Objectives

To provide efficient fiscal oversight and analysis of operating and capital projects, and processing of related expenditures on a weekly basis.

To accomplish 90% customer satisfaction with "quality customer service" within 1 week of request .

To prepare and monitor reimbursement requests to Sarasota County, Florida Department of Transportation and Florida Department of Environmental Protection, per their individual project agreements, and follow-up with form letters requesting reimbursement every thirty days until payment is received.

Performance Measures

Description	Unit	FY2000	FY2001	FY2002
Output Measure				
P.O.'s and invoices processed	Number	n/a	360	375
Incoming/outgoing correspondence	Number	n/a	15,000	15,500
Telephone calls/walk-in traffic	Number	n/a	18,750	19,000
Effectiveness Measure				
PO's/invoices processed within 24 hr.	Percent	n/a	n/a	98

ENGINEERING ADMINISTRATION

Effectiveness Measure

Customer request response time w/i 1 wk.	Percent	n/a	n/a	90
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Efficiency Measure

Cost per P.O. & invoice	Dollars	n/a	\$10.74	\$10.31
Cost per correspondence	Dollars	n/a	\$1.61	\$1.56
Cost per customer service	Dollars	n/a	\$0.14	\$0.14

Expenditures By Category

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
Personal Expenditures	124,397	131,573	119,967	0	119,967
Non Personal Expenditures	41,314	39,993	57,615	0	57,615
Capital Expenditures	525	0	0	0	0
Totals	\$166,236	\$171,566	\$177,582	\$0	\$177,582

Personnel Summary

Actual Positions		2.00	0.00	2.00
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ENGINEERING TRANSPORTATION

Description of Operations

The Transportation program plans and develops transportation related projects prior to being incorporated into the Capital Improvement Program (CIP), a program which is packaged by the City's Finance Department and approved by the City Commission that includes all City projects that are either funded or scheduled for construction in the next 10 years.

In addition, this cost center measures the impact of developments throughout the City by reviewing and determining if a project is de minimis or if a traffic study is required; reviewing of transportation concurrency and traffic circulation reports for compliance with the applicable criteria of the City Code; designing of City infrastructure related to transportation improvements on roadways; implementing, operating and maintaining the City's computerized multi-arterial traffic control system; maintaining and operating the City's traffic count program, and; investigating the feasibility of installing traffic signs and pavement markings so the general public has a safe, efficient flow and convenient transportation system.

Traffic calming is defined as a combination of physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street use. The process for a Traffic Calming Program is as follows: (1) Neighborhood Association or citizen submits a petition to the City Engineer. (2) The formation of a Neighborhood Traffic Calming Task Force. (3) The traffic study area is determined. (4) The Engineering Department conducts a traffic study. (5) The Engineering Department presents traffic study results to the Neighborhood Task Force and together develops a Traffic Calming Master Plan. (6) The Task Force, together with the Engineering Department, holds an open house for the neighborhood to review the Traffic Calming Master Plan. (7) The Engineering Department, together with the Task Force, makes a recommendation to the City Commission for approval of the Traffic Calming Master Plan. (8) A public hearing is held and the City Commission approves or disapproves the Traffic Calming Master Plan. If the Plan is approved, the project goes to bid and construction of physical measures is implemented. (9) A follow-up traffic study is conducted by the Department of Engineering to determine the effectiveness of the measures implemented.

In 1985, the Florida Legislature enacted comprehensive growth management legislation to manage the growth and protect the state's straining infrastructure. The most potent component of this growth management act was a concept called "Concurrency" (Section 163.3180, Florida Statutes). It required that transportation needed to serve new development be in place or under construction no more than three years after issuance of a development order.

A "de minimis" impact is an impact that would not affect more than 1 percent (1%) of the maximum volume at the adopted level of service of the affected transportation facilities as determined by the City, utilizing the most recent table of the generalized two-way peak hour volumes in the Florida Department of Transportation (FDOT), Level of Service Handbook.

The Transportation Program ensures that no development approvals are issued that would degrade the Level of Service (LOS) conditions on roads below adopted standards. The City's adopted LOS standards are part of the City's comprehensive plan, Sarasota City Plan (1998).

Goal - Attractive, Safe & Environmentally-Friendly City

To plan and design roadways as a safe place for people and manage the City's transportation system to provide healthy neighborhoods.

Objectives

Review the "Required Transportation Concurrency Information" application for determination of de minimis or if traffic study is required, 90% on time.

Conduct traffic concurrency and traffic circulation studies, 90% on time.

Monitor the traffic signal timing and respond 90% on time to requests.

Investigate the feasibility of installing traffic signs and pavement marking based on requests, 95% on time.

ENGINEERING TRANSPORTATION

Performance Measures

Description	Unit	FY2000	FY2001	FY2002
Output Measure				
Concurrency/traffic studies conducted	Number	n/a	250	300
Traffic signal timing maintained	Number	n/a	250	230
Signs & pavement markings	Number	n/a	120	180
Effectiveness Measure				
Traffic studies completed	Percent	n/a	92	90
Traffic signal timing	Percent	n/a	88	90
Requests for signs/markings	Percent	n/a	83	95
Efficiency Measure				
Cost per traffic concurrency & study	Dollars	n/a	\$105.13	\$87.61
Cost per traffic signal timing	Dollars	n/a	\$61.70	\$67.07
Cost per service request for signage	Dollars	n/a	\$54.08	\$36.05

Expenditures By Category

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
Personal Expenditures	275,726	368,767	229,490	0	229,490
Non Personal Expenditures	11,528	17,295	32,930	0	32,930
Capital Expenditures	28,406	0	500	0	500
Totals	\$315,660	\$386,062	\$262,920	\$0	\$262,920

Personnel Summary

Actual Positions	5.00	0.00	5.00
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ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

Description of Operations

The City Engineer oversees the City right-of-way. This responsibility includes permitting, inspection, planning, design and monitoring of the various uses of the right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. This right-of-way is intended for public uses such as roads, utilities, (both public and private) clear zones for traffic safety, sidewalks and pathways, bicycle lanes and trails, drainage facilities, signage and access between property and the roadway system.

Permitting - As an element of overseeing the activities within the right-of-way, the Engineering Department is responsible for the oversight of construction of new facilities, the reconstruction of existing facilities as well as the construction of projects proposed by other City Departments, private developers and homeowners within the City right-of-way or their access to the right-of-way. This cost center is responsible for permitting and inspection of all activities within the public right-of-way. Permits issued by and inspected for compliance by this cost center are:

Sidewalk Café Permits - Due mainly to our beautiful climate, many local restaurants enjoy offering their guests the option of sitting outside while dining. To ensure that the dining establishment has addressed all comfort and safety measures, and since many times the Café will utilize public right-of-way, the City requires that a Sidewalk Café Permit be obtained. Note these are different from "Outdoor Restaurants", which are on private property and administered by the Building, Zoning and Code Enforcement Department.

Valet Parking Permits - Valet Parking Permits are requested by area businesses, including restaurants and theaters, for the convenience and benefit of their guests if they intend to use the right-of-way. Please note that valet parking must be available to the general public and not limited to patrons of the sponsoring business.

Encroachment Permits - Encroachment permits are required when an object has been placed in any right-of-way within the City.

Driveway Permits - When a business or homeowner wishes to provide vehicular access from their property to the City roadway system, they must apply for a driveway permit and construct this access in accordance with the Engineering Design Criteria Manual. This manual provides engineering guidelines for work done within the City Limits.

Right-of-way Use Permits - Any other activity performed within the right-of-way, other than that already noted above, is under taken, a right-of-way use permit is required. This work may consist of activities such as work by a franchised utility (telephone, electric power, cable, gas, etc), work by a public utility (water and sewer) and infrastructure projects (streets, sidewalk, curb and gutter, etc).

Newsrack Permits - Newsracks are a typical part of any downtown street. Whether looking for a local, regional or national newspaper, or information on area homes for sale, for example, it is convenient to have newsracks placed at heavily traveled locations throughout the City. Due to the high demand for newsracks, the desire to maintain the beauty of our streets, and the need to protect our residents and visitors, the City of Sarasota has devised a set of standards to which all those wishing to place, fill, and maintain newsracks must adhere per City Code 30-130.

Construction Inspection - This cost center also provides full time construction inspection during Engineering Department initiated construction projects and for other departments when necessary. This includes coordination with the public, other City departments and utilities during the construction project, evaluation of pay requests, field directives, and change orders when necessary and final project acceptance.

Goal - Attractive, Safe & Environmentally-Friendly City

To permit and inspect projects under construction to ensure that the City is a safe place for people and to further ensure compliance with City regulations and maintain visual appeal of the City by frequent monitoring of the right-of-way.

ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

Objectives

To provide consistent and frequent monitoring of the right-of-way for permit compliance on a weekly basis.

Construct 80% of projects on time.

Construct 85% of projects within budget.

Issue 90% of permits on time.

Performance Measures

Description	Unit	FY2000	FY2001	FY2002
Output Measure				
Right-of-way inspections performed	Number	n/a	n/a	550
Projects constructed	Number	n/a	n/a	8
Permits issued	Number	n/a	n/a	550
Effectiveness Measure				
Right-of-way inspections performed	Percent	n/a	n/a	90
Projects completed on time	Percent	n/a	n/a	80
Projects completed within budget	Percent	n/a	n/a	85
Permits issued on schedule	Percent	n/a	n/a	90
Efficiency Measure				
Cost per right-of-way inspection	Dollars	n/a	n/a	\$21.61
Cost per permit issued	Dollars	n/a	n/a	\$60.96
Cost per in-house construction proj (PS)	Dollars	n/a	n/a	\$5,162.50

Expenditures By Category

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
Personal Expenditures	169,616	140,848	261,033	0	261,033
Non Personal Expenditures	2,307	3,640	3,060	0	3,060
Capital Expenditures	500	0	0	0	0
Totals	\$172,423	\$144,488	\$264,093	\$0	\$264,093

Personnel Summary

Actual Positions	5.15	0.00	5.15
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ENGINEERING DESIGN

Description of Operations

The City Engineer oversees the City right-of-way. This responsibility includes permitting, inspection, planning, design and monitoring of the various uses of the right-of-way. A right-of-way is a strip of land acquired by reservation, dedication or condemnation. This right-of-way is intended for public uses such as roads, utilities, (both public and private) clear zones for traffic safety, sidewalks and pathways, bicycle lanes and trails, drainage facilities, signage and access between property and the roadway system.

As an element of overseeing the activities within the right-of-way, the Engineering Department is responsible for the design of new facilities, the design for reconstruction of existing facilities as well as review of projects proposed by other City Departments and private developers within the City right-of-way or their access to the right-of-way.

The Engineering Planning and Design cost center endeavors to provide well planned, City Code compliant infrastructure improvement projects through timely concise design (accomplished internally or externally) and code compliance development plan review (public and private development projects). To help facilitate the project design, the Engineering Department also has developed and maintains the Engineering Design Criteria Manual (EDCM) for use on all design projects, both public and private, within the City Limits.

Planning and Preliminary Design

Efforts toward proper project planning require extensive involvement with neighborhood representatives, and expenditures of a considerable amount of staff time in providing field locations required for both planning and construction determinations. Planning and review of proposed projects by this cost center are prerequisite to creating project design internally or to negotiating to have the design contractually accomplished. Also the determination of the required right-of-way for a project is done during the preliminary design phase.

Final Design

After the completion of the preliminary planning and design, this cost center is responsible for the project layout, final project design, construction drawings project specification and permitting. This can be done with in-house forces or through a consultant. This final design phase work effort includes obtaining the required permits, acquiring the necessary right-of-way, and completing the construction drawing and project specifications. Also included in the cost center is the evaluation of projects undertaken by private developers and well as other City Departments for compliance with the City of Sarasota Engineering Design Criteria Manual.

Bidding and Award of Construction

Once the design and specifications are complete, the project goes out for public bidding through the City's Purchasing Department. This cost center coordinates this work with the Purchasing Department, holds the pre-bid meeting, prepares any required addenda and recommends award of the construction contract.

Goal - Responsible City Government

To design and/or review projects to provide City Code compliance, feasibility and financially constructable projects by private and public entities.

Objectives

Provide "review comments" for all plans within five business days of their receipt.

Design 80% of in-house projects on time.

Contract agreements to be at or below estimated cost 85% of the time.

ENGINEERING DESIGN

Performance Measures

Description	Unit	FY2000	FY2001	FY2002
Output Measure				
Plans reviewed	Number	n/a	n/a	192
In-house projects designed	Number	n/a	n/a	4
Contracts and agreements executed	Number	n/a	n/a	3
Effectiveness Measure				
Review comments provided on schedule	Percent	n/a	n/a	100
In-house designs accomplished	Percent	n/a	n/a	80
Est. & agmnts. negotiated w/i budget	Percent	n/a	n/a	85
Efficiency Measure				
Cost per plan review	Dollars	n/a	n/a	\$194.23
In-house design cost as % of construct'n	Percent	n/a	n/a	23
Consultant cost as % of construct'n cost	Percent	n/a	n/a	25

Expenditures By Category

	FY 2000 Actual	FY 2001 Budget	FY 2002 Continuation	FY 2002 Issues	FY 2002 Totals
Personal Expenditures	196,947	198,096	257,653	0	257,653
Non Personal Expenditures	4,361	2,930	4,005	0	4,005
Capital Expenditures	2,935	0	600	0	600
Totals	\$204,243	\$201,026	\$262,258	\$0	\$262,258

Personnel Summary

Actual Positions	4.85	0.00	4.85
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