

ENGINEERING

Mission Statement

To ensure the public safety by providing high quality engineering services through traffic control, transportation and right-of-way management; compliance to design and construction standards.

Description of Operations

The Engineering Department/City Engineer is responsible for regulating everything that is 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, lighting, signage and access between property and the roadway system.

The Engineering Department is comprised of four individual "cost center" teams: Administration, Transportation, Construction Inspection/Administration and Design.

The Administration Team provides leadership, direction and support to all Engineering Department activities through switchboard and reception, clerical assistance, record management, 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, and preparation of City Commission agenda related materials. This team 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 and/or interlocal agreements, as well as applying for grants and disaster assistance, along with analysis of operating and capital projects, and the processing of all related expenditures.

The Transportation Team plans and develops projects prior to being incorporated into the City's Capital Improvement Program (CIP), a program which is developed through the City's Finance Department and approved by the City Commission that includes all City projects that are scheduled for construction in the next 10 years. The Transportation team also measures the impact of proposed 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 signal 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 are functions of this team.

Traffic Calming is a part of the Transportation Team 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 Construction Inspection/Administration Team is responsible for permitting (utilities, 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 team 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 Design Team provides well planned, City Code compliant infrastructure improvement projects through timely and concise design (accomplished internally or externally) and development plan review (public and private development projects) for code compliance. 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 team 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 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
028621 ADMINISTRATION	183,065	205,905	211,357	41,000	252,357
028622 TRANSPORTATION	251,583	308,841	326,075	10,000	336,075
028623 CONSTRUCTION INSPECTION/ADMINIS'	233,799	267,904	280,313	0	280,313
028624 DESIGN	286,159	321,669	333,491	0	333,491
Totals	\$954,606	\$1,104,319	\$1,151,236	\$51,000	\$1,202,236

Department Expenditures By Category

	FY 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
Personal Expenditures	860,251	999,025	1,060,947	0	1,060,947
Non Personal Expenditures	75,995	93,944	90,289	41,000	131,289
Capital Expenditures	18,360	11,350	0	10,000	10,000
Totals	\$954,606	\$1,104,319	\$1,151,236	\$51,000	\$1,202,236

Personnel Summary

Actual Positions	19.00	19.00	0.00	19.00
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Revenue Summary

	Total
LICENSES & PERMITS	247,340
INTERGOVERNMENTAL	64,214
CHARGES FOR SERVICES	2,412
INTRAGOVERNMENTAL SERVICES	137,175
	\$451,141

ENGINEERING ADMINISTRATION

Mission Statement

To provide the highest level of support to all "Teams", customers and constituents through leadership, financial responsibility and high quality customer service.

Description of Operations

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

This Team is responsible for the preparation and maintenance of the Engineering Department's budget, as well as all accounting related activities; i.e., purchase orders, expenditure vouchers, invoicing, travel arrangements, analysis of operation and capital improvement projects.

This Team maintains and processes paperwork necessary in collecting revenues from various Local, State and Federal agencies for construction projects, disaster relief and inter-local agreements.

This Team prepares the project specification manual for all departmental construction projects; as well as conducting, scheduling and transcription of pre-bid and pre-construction meeting minutes. This Team works closely with General Services (Purchasing Department) to ensure that all requirements have been met, prior to the contractor being issued a "Notice to Proceed" for commencement of work.

This Team provides support through switchboard and reception, management of all incoming and outgoing correspondence, preparation and submittal of all City Commission agenda items, visual display materials, coordination of meetings and dissemination of information related to departmental projects and services.

All Engineering Department employee related activities are maintained by this Team. These activities consist of supervision, preparation and processing of employee evaluations, payroll, recruitment and disciplinary action.

Goal - Responsible City Government

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

Objectives

To provide leadership, to be a financially responsible department by monitoring and maintaining the department budget, and provide high quality customer service.

To accomplish customer satisfaction by providing "quality customer service" in responding to customers concerns/requests within one (1) week of original 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 the reimbursement request every thirty (30) days until payment is received.

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

To prepare, monitor and collect reimbursements from Sarasota County (Tourist Development Funds and Transportation Impact Fees), Florida Department of Transportation (Siesta Drive and Bayfront Multi-Use Recreational Trail) and follow-up to ensure payments are received within thirty (30) days of invoice.

Performance Measures

Description	Unit	FY 2001	FY 2002	FY 2003	FY 2004
Output Measure					
PO's/EV's and invoices processed	Number	n/a	748	586	615
Incoming/outgoing correspondence proc'd	Number	n/a	10,754	11,628	13,000
Telephone calls/walk-in traffic	Number	n/a	5,868	8,080	8,900
Grant reimbursement requests processed	Number	n/a	5	4	4

ENGINEERING ADMINISTRATION

Output Measure

Reimbursements rcv'd from SRQ County	Dollars	n/a	n/a	\$504,000	\$250,000
Reimbursement rcv'd from FDOT (State)	Dollars	n/a	n/a	\$55,000	\$60,000

Effectiveness Measure

PO/EV/invoices processed within 1 wk.	Percent	n/a	90	92	94
Customer request response time in 1 wk.	Percent	n/a	90	92	94
Grant reimb. request received in 90 days	Percent	n/a	75	78	80
County reimbursements rcv'd w/in 30 days	Percent	n/a	n/a	90	92
State reimbursements rcv'd w/in 30 days	Percent	n/a	n/a	50	55

Efficiency Measure

Cost per PO/EV/Invoice	Dollars	n/a	\$1.90	\$2.54	\$2.50
Cost per correspondence	Dollars	n/a	\$1.30	\$0.40	\$0.37
Cost per customer service	Dollars	n/a	\$0.25	\$0.37	\$0.35
Cost per \$100,000 Grant reimbursement	Dollars	n/a	\$147.38	\$116.28	\$107.61
Costs assoc. to receive County reimb.	Dollars	n/a	n/a	\$208.00	\$180.67
Costs assoc. to receive FDOT reimb.	Dollars	n/a	n/a	\$61.20	\$63.30

Expenditures By Category

	FY 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
Personal Expenditures	119,474	148,715	156,898	0	156,898
Non Personal Expenditures	55,127	52,940	54,459	41,000	95,459
Capital Expenditures	8,464	4,250	0	0	0
Totals	\$183,065	\$205,905	\$211,357	\$41,000	\$252,357

Personnel Summary

Actual Positions	2.50	2.50	0.00	2.50
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Revenue Summary

	Total
CHARGES FOR SERVICES	2,412
INTRAGOVERNMENTAL SERVICES	60,000
	\$62,412

ENGINEERING TRANSPORTATION

Mission Statement

To provide a safe, convenient and efficient transportation system with a level-of-service that sustains the City's natural, aesthetic, social and economic resources, and to minimize traffic intrusion on the City's neighborhood streets.

Description of Operations

The Transportation Team plans and develops transportation related projects prior to being incorporated into the City's 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 Team 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.

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.

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 Engineering Department to determine the effectiveness of the measures implemented.

The Transportation Team 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.

ENGINEERING TRANSPORTATION

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.

Performance Measures

Description	Unit	FY 2001	FY 2002	FY 2003	FY 2004
Output Measure					
Concurrency/traffic studies conducted	Number	n/a	135	280	275
Traffic signal timing software mgmt.	Number	n/a	500	520	520
Sign requests	Number	n/a	88	95	105
Pavement marking requests	Number	n/a	18	23	33
Effectiveness Measure					
Traffic studies completed w/i Agmt. Guid	Percent	n/a	90	85	88
Traffic signal timing inq. resolved 1wk.	Percent	n/a	90	94	95
Requests for signage - perf. in 2 wks.	Percent	n/a	85	90	92
Req. for pavement markings - perf. 2 wks	Percent	n/a	50	50	52
Efficiency Measure					
Cost per traffic concurrency & study	Dollars	n/a	\$46.32	\$30.88	\$32.54
Cost per software mgmt./signal timing	Dollars	n/a	\$25.26	\$38.82	\$40.18
Cost per signage request	Dollars	n/a	\$43.16	\$41.23	\$38.61
Cost per pavement marking request	Dollars	n/a	\$22.81	\$21.11	\$15.23

Expenditures By Category

	FY 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
Personal Expenditures	226,292	271,006	299,389	0	299,389
Non Personal Expenditures	15,395	31,335	26,686	0	26,686
Capital Expenditures	9,896	6,500	0	10,000	10,000
Totals	\$251,583	\$308,841	\$326,075	\$10,000	\$336,075

Personnel Summary

Actual Positions	5.75	5.75	0.00	5.75
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Revenue Summary

	Total
INTRAGOVERNMENTAL SERVICES	77,175
	\$77,175

ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

Mission Statement

To ensure that the City is a safe place for people through proper administration of construction contracts, inspection of City and private construction projects, with monitoring of use of the rights-of-way through permitting and verification for compliance with City regulations.

Description of Operations

The City Engineer regulates the use of 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.

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.

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 Team 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" Team 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 (EDCM). 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 undertaken, 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.

ENGINEERING

CONSTRUCTION INSPECTION/ADMINISTRATION

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.

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	FY 2001	FY 2002	FY 2003	FY 2004
Output Measure					
Right-of-way inspections performed	Number	n/a	310	470	525
Projects constructed	Number	n/a	5	6	5
Permits issued	Number	n/a	552	742	800
Effectiveness Measure					
Right-of-way inspections performed	Percent	n/a	91	92	93
Projects completed on time	Percent	n/a	80	80	80
Projects completed within budget	Percent	n/a	85	85	85
Permits issued on schedule	Percent	n/a	90	92	93
Efficiency Measure					
Cost per right-of-way inspection	Dollars	n/a	\$16.87	\$13.41	\$12.42
Cost per permit issued	Dollars	n/a	\$11.78	\$10.98	\$10.55
In-house construction cost (% of const.)	Percent	n/a	23	15	12

Expenditures By Category

	FY 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
Personal Expenditures	232,621	264,714	277,373	0	277,373
Non Personal Expenditures	1,178	3,190	2,940	0	2,940
Totals	\$233,799	\$267,904	\$280,313	\$0	\$280,313

Personnel Summary

Actual Positions	5.05	5.05	0.00	5.05
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Revenue Summary

	Total
LICENSES & PERMITS	230,840
	\$230,840

ENGINEERING DESIGN

Mission Statement

To ensure that the City is a safe place for people through the planning, design and awarding of construction contracts, as well as reviewing other City and private commercial projects to verify all City regulations are met.

Description of Operations

The City Engineer regulates the use of 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 regulating 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 Design Team endeavors to provide well planned, City Code compliant infrastructure improvement projects through timely concise design (accomplished internally or externally) and Code compliant 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 Team 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 Team 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, 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 (EDCM).

Bidding and Award of Construction

Once the design and specifications are complete, the project goes out for public bidding through the City's General Services Department (Purchasing Division). This Team coordinates this work with the Purchasing Division, 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.

ENGINEERING DESIGN

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.

Performance Measures

Description	Unit	FY 2001	FY 2002	FY 2003	FY 2004
Output Measure					
Plans reviewed	Number	192	279	821	697
In-house projects designed	Number	4	5	6	5
Contracts and agreements executed	Number	n/a	3	8	9
Effectiveness Measure					
Review comments provided on schedule	Percent	n/a	90	92	92
In-house designs accomplished	Percent	n/a	80	80	80
Est. & agmnts. negotiated w/i budget	Percent	n/a	85	85	85
Efficiency Measure					
Cost per plan review	Dollars	\$194.23	\$110.80	\$46.81	\$51.84
In-house design costs, % of const.	Percent	n/a	n/a	20	18
Consultant design costs, % of const.	Percent	n/a	25	25	16

Expenditures By Category

	FY 2002 Actual	FY 2003 Budget	FY 2004 Continuation	FY 2004 Issues	FY 2004 Totals
Personal Expenditures	281,864	314,590	327,287	0	327,287
Non Personal Expenditures	4,295	6,479	6,204	0	6,204
Capital Expenditures	0	600	0	0	0
Totals	\$286,159	\$321,669	\$333,491	\$0	\$333,491

Personnel Summary

Actual Positions	5.70	5.70	0.00	5.70
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Revenue Summary

	Total
LICENSES & PERMITS	16,500
INTERGOVERNMENTAL	64,214
	\$80,714

ADMINISTRATION

LOBBYING SERVICES NON-REIMBURSEABLE EXP.

In order to successfully secure grant funding for Beach Renourishment Projects (Lido Beach), it is necessary to continue the lobbying efforts through our Washington D.C. Lobbyist Howard Marlowe, and becoming a member of "Beach Watch". The Beach Watch membership, in addition to our current membership with the Florida Shore and Beach Preservation Association (FSBPA), will enable us to have a stronger voice in Tallahassee and Washington. In taking an active role in the lobbying efforts and memberships, it will be necessary for numerous conferences to be attended by the City Engineer.

Cost of Issue

Personal	0
Operating	41,000
Capital	0
Transfers	0
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Total	\$41,000

TRANSPORTATION

TRAFFIC ANALYSIS & SIMULATION SOFTWARE

Software that analyzes the available capacity of the transportation network and simulates the actual conditions of the network.

This software will assist our department in the decision making and public involvement process by allowing us to simulate the existing conditions and capacity of the transportation network. This software will be a visual tool allowing the public to visualize the impacts of the existing and proposed transportation condition.

Cost of Issue

Personal	0
Operating	0
Capital	10,000
Transfers	0
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Total	\$10,000