

INDEPENDENT COST ESTIMATE (ICE) FORM

	SHADED AREA FOR PROCUREMENT USE ONLY
Project Name & Title	
Purchase Requisition (PR)#	Assigned Buyer #
	D/M/WBE %
☐ NEW CONTRACT/PROCUREMENT	
☐ EXPIRING CONTRACT TO BE MODIFIED	Contract #
	PO#
☐ CONTRACT MODIFICATION	Contract #
	PO#
DATE	
REQUESTOR	
PHONE NUMBER	
EMAIL	
ESTIMATE \$	(include shipping and handling)
Disease substantiate the action to be unavaiding a com-	
Please substantiate the estimate by providing a com	piete estimate using one of the attached pages.
If the scope of work includes any required computer software information Technology (IT), the IT Manager's acknowledge.	ware, hardware, data transmission or electronic equipment needed to comply with Metro's gement is required.
T MANAGER	DATE
The budget for this acquisition has been identified and the	
DIRECTOR OF BURDET	
DIRECTOR OF BUDGET	DATE
DIRECTOR OF GRANTS	DATE
FTA FUNDED Yes No UNIDOT FUNDED Yes No	IBUDGETED MEMO ATTACHED? Yes ☐ No ☐
The scope and ICE are complete and conforms with Metro	o's Policies and Procedures for Procurement.
PROJECT MANAGER	DATE
	detailed scope of work and estimate with your Purchase Requisition (PR). Procurement cannot start the wn form and period of performance. Procurement and Contract Administration will advise you of any

Requestor: You are required to provide Procurement with a detailed scope of work and estimate with your Purchase Requisition (PR). Procurement cannot start the acquisition process without the scope, ICE, bid price breakdown form and period of performance. Procurement and Contract Administration will advise you of any deficiencies in writing and will hold the PR and this form for five (5) working days. A scope of Work Checklist, Estimate Guide and Estimate forms are provided as attachments to assist you in completing some of the required information.

Processing Times:

- Request For Proposals \$100,000 or greater: **180 workdays** from the time a complete ICE form is assigned to a Contract Specialist/Buyer to the date of Notice To Proceed is issued.
- Sealed Bids \$100,000 or greater: 90 workdays from the time the complete ICE form is assigned to a Contract Specialist/Buyer to the date the Notice To Proceed is issued.
- Request For Quotations Under \$100,000: **14 to 30 workdays** from the time the complete ICE form is assigned to a Contract Specialist/Buyer to the date the Notice To Proceed is issued.
- Fax Quotes Under \$100,000: up to 14 workdays from the time the complete ICE form is assigned to a Contract Specialist/Buyer to the date a Purchase Order is issued.
- Change Orde/Modificationr 15 workdays from the time the complete ICE form, justification and Proposed Change Request (PCR) are provided to the Contract Administrator (CA) to date the change is executed.

		Attachment PM15
 GEC Task Order – 10 – 20 workdays from the time the These times are averages and are provided to allow you suffice. 	complete ICE form and scope of work is pro	ovided to the CA to the date the task order is issued.
These times are averages and are provided to allow you sun	ncient time to plan your delivery dates.	
Independent Cost Estimate (ICE) Form	2	5/24/04
1		Version 3

INDEPENDENT COST ESTIMATE (ICE) GUIDE PART I (See Part III, Scope OF Services Checklist) {Enter Project Name}

The attached Scope of Work contains at a minimum the following:

For Materials:	For Consultants:
Quantity of items and/or materials required	List of responsibilities to be performed by consultant
☐A detailed description of each item required	☐A detailed list of deliverables required from consultant
Specifications and/or drawings for materials required	Anticipated contract term and start date
Date materials are required	Location of project
Delivery address and Metro's point of contact	☐Project manager's name, phone number, fax number and email address
For Contractors:	
☐A detailed list of tasks to be performed by the Contractor	Anticipated Contract Term and Start Date
Specifications, drawings and/or pictures of job site or projected results of contractor's tasks	☐Location of project
	☐ Project Manager Name, phone number, fax number and email address

Note: The above are applicable if a firm-fixed price (FFP) contract is contemplated.

(Insert Scope of Work here)

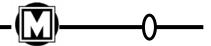
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Submitted By:	Date:	PR#

Estimate Guide PART II

Estimate Type	Items to Include	Where to find supporting information
Services	 The tasks you want done 	Current or past contracts for similar services
(Other than A&E)	The types of people needed (i.e.,	Other properties/departments doing similar work
	supervisor, admin assistant other)	Project Control/Engineering or Contract Administration staff
	The positions required (i.e., Project	can assist you in obtaining historical price and cost data
	Manager, Deputy PM, Senior	
	Engineer/Planner, other)	
	The estimated hours by position	
	The salary/billing rates applied	
	Prevailing wage rate category applied	
	The profit/applied fee	
	Direct expenses	
	Completion schedule	
Architect, Engineers,	 The tasks you want done 	Current or past contracts for similar services
Designers	The types of people needed (I.e.,	Other properties/departments doing similar work
	engineers, admin assistant, other)	Project Control/Engineering or Contract Administration staff
	The positions: Project Manager,	can assist you in obtaining historical price and costs data
	Deputy PM, Senior Engineer/Planner,	
	Other	
	4. The estimated hours by position	
	5. The salary/billing rates applied	
	6. The profit/applied fee	
	7. Overhead rate %	
	8. Direct expenses	
On a de /Francisco a a a t	Completion schedule	A Mandanas Madatas as a
Goods/Equipment	Product needed	Vendor survey/Market survey
	2. Quantity 3. Unit price	Current or past contracts for the same or similar product Procurement and Contract Administration staff can assist you
	 Markups – overheads – profit Delivery Schedule desired 	in obtaining historical price and costs data
	,	
	6. Warranty	

Construction 1. Product needed 2. Labor (at a minimum use Davis Bacon) 3. Materials 4. Current or past contracts for the same project 4. Bonds 5. Insurance 6. Mobilization 1. "Means Book" 2. "Blue Book" 3. Davis Bacon Wage Rates www.gpo.gov/davisbacon 4. Current or past contracts for the same project 5. Project Control/Engineering or Contract Administration staff can assist you in obtaining historical price and cost data			Attachment PM15
7. Equipment 8. Mark ups; fringes, overheads, profit 9. Completion schedule	Construction	 Labor (at a minimum use Davis Bacon) Materials Bonds Insurance Mobilization Equipment Mark ups; fringes, overheads, profit 	 "Blue Book" Davis Bacon Wage Rates www.gpo.gov/davisbacon Current or past contracts for the same project Project Control/Engineering or Contract Administration staff

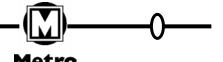


Submitted By:	Date:	PR#	
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Metro ARCHITECTURAL AND ENGINEERING (A&E) SERVICES **WORK ESTIMATE SHEET PART IIa**

Direct Labor	ne Under the Grant i	Rate/Salary	Total Labor
Direct Labor	liouis	ixate/Salai y	Hours/Rate/Salary
			Tioure/Hute/Guidiy
Project Manager			\$ 0.00
Senior Engineer			\$ 0.00
Senior Engineer			\$ 0.00
List applicable labor categories:			
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Other Staff			\$ 0.00
Total Direct Labor			\$0.00
	Overhead		Total Overhead Costs
	%		Overhead x Total Labor
Overhead/Indirect Costs	%		\$0.00
Fixed Fee (Limited to 10% of the	%		\$0.00
total labor and overhead			
expense)			
Direct Expenses			
Travel (Lump Sum)			\$ 0.00
Travel (Per Mile)			\$ 0.00
Meals			\$ 0.00
Lodging			\$ 0.00
Postage			\$ 0.00
Telephones			\$ 0.00
Copies			\$ 0.00
Other Direct Expenses (Describe ODCs)			\$ 0.00
Other Direct Expenses			\$ 0.00
(Describe ODCs)			·
Total Direct Expenses			\$0.00
•	TOTAL ESTIMATE	D COST	\$0.00

If federal funds are used cost principles of FAR Part 31 for cost reimbursement type contracts apply. See website http://www.arnet.gov/far.



Submitted By:	Date:	PR#

SERVICES WORK ESTMATE SHEET PART IIb

Labor Type	# of Hours	Billing Rate*	Total Labor Hours x
-			Billing Rate
Site Supervisor			\$ 0.00
Journeyman 1			\$ 0.00
Journeyman 2			\$ 0.00
Journeyman Assistant			
Provide Specific Labor Category:			\$ 0.00
Other			\$ 0.00
		Total Labor:	\$0.00
Other Expenses	Qty	Unit Rate	Total Cost
			Hours x Unit Rate
Training			\$ 0.00
Insurance			\$ 0.00
Warranty			\$ 0.00
Transportation			\$ 0.00
Equipment (Rental/Lease)			\$ 0.00
Repair Job			\$ 0.00
	TOTAL EST	IMATED SERVICES:	\$0.00

^{*} Use current prevailing wage rate



Submitted By: Date: PR#

Metro

EQUIPMENT ESTIMATE SHEET PART IIc

Quantity	Item Description	Unit Of Measure (ea, lb., ft., box, gal, crtn., ton,)	Unit Price	Total Price
				\$ 0.00
				\$ 0.00
				\$ 0.00
				\$ 0.00
				\$ 0.00
				\$ 0.00
				\$ 0.00
				\$ 0.00
	Warranty			\$ 0.00
	Warranty			
	Training			\$ 0.00
	Handling Fee (If applicable)			\$ 0.00
	Shipping Costs (If applicable)			\$ 0.00
	Total Equipment Estimate (Rental/Lease Equipment)			\$0.00

¹ Multiply the Quantity by the Unit Price to determine the total price



SCOPE OF SERVICES (SOS) CHECKLIST

PART III

The Scope of Services (SOS) generally consists of a title page and six sections as follows:

- Title Page
- Introduction [Section 1.0]
- Background [Section 2.0]
- Scope [Section 3.0]
- Reference Documents [Section 4.0]
- Technical Requirements [Section 5.0]
- Deliverables/Contract Data Requirements List (CDRL) [Section 6.0]

	Item	Yes	No	N/A
A.	TITLE PAGE			
1.	Does the title page include the following:			
	Name of project/program			
	• Date prepared (Date changes as SOS is edited)			
	Name of department preparing SOS			
	• Version number in footer of page (If changes have been made)			
B.	INTRODUCTION (SECTION 1.0): The introduction section			
	should give the contractor just enough information to recognize			
	what you are buying. It is normally one to three sentences long.			
	The introduction should focus on clarity and content rather than			
	length.			
1.	Does the introduction provide a quick reference to what you are			
	buying?			
2.	Is the introductory information readily distinguishable from the			
	background and scope sections?			
3.	Have work requirements or other redundant information that is			
	contained in other sections of the SOS been removed?			
REMA	ARKS:			

Attachment PM15

BACKGROUND (SECTION 2.0): The background section provides historical information which is necessary to understand now and/or why the current requirement evolved and where it is neaded, if appropriate. The background section can also provide current information which helps the contractor understand the requirement. If the current requirement is part of a larger program, identify the program and the relationship of this requirement to the overall project. Does this section summarize historical information which is necessary o understand the current requirement? Will the contractor understand how and/or why the requirement		
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Will the contractor understand how and/or why the requirement		
evolved and where the requirement is headed, if appropriate?		
s the background information readily distinguishable from the		
ntroduction and scope sections?		
Are the facts accurate?		
Have all directions to perform specific tasks, specification		
requirements and deliverables been eliminated from this section?		
They belong in other sections of the SOS)		
RKS:		

	Item	Yes	No	N/A
D.	SCOPE (SECTION 3.0): The scope section is an overview of the			
	SOS and should emphasize the most important aspects of the			
	requirement rather than minor details. It should identify the			
	objective or purpose of the requirement; it should help the			
	contractor understand the magnitude of the effort to be performed			
	and it should also define the outside boundaries of the contractor's			
	performance responsibilities. This becomes important during			
	contract performance in determining whether additional tasks or			
	work is considered within the originally planned responsibilities or			
	is considered new work. The scope section should be clear and			
	consistent with the requirements specified in Section 4.0, Technical			
	Requirements. The scope section should be no more than one to			
	two paragraphs.			
1.	Will the contractor understand the magnitude of the requirement and			
	have a basic understanding of the requirement?			
2.	Is the scope readily distinguishable from the introduction and			
	background sections?			
3.	Is the scope consistent with the tasks or activities specified, and with			
	the end result to be obtained?			
4.	Does the section emphasize the most important aspects (i.e., an			
	overview) of the technical requirements rather than minor details?			
5.	Have all directions to perform specific tasks, specification			
	requirements and deliverables been eliminated from this section?			
REMA	(They belong in other sections of the SOS)			

	Item	Yes	No	N/A
E.	REFERENCE DOCUMENTS (SECTION 4.0): This section lists			
	all documents referenced under Section 5.0, technical			
	requirements, that the contractor will have to comply with in the			
	performance of the SOS (e.g., Agency policies, state and federal			
	laws and specifications, state/city codes, etc.). If the technical			
	requirements section describes your requirements in functional or			
	performance terms (i.e., "what is required" versus "how to do it"),			
	then this section should include only a minimum of documents.			
	Generally, this section is prepared after the technical requirements			
	section is completed. The length of this section will depend on the			
	number of documents cited in the technical requirements section.			
1.	Is the applicable document properly cited? (Correct Volume No., date,			
	Revision No. etc.)			
2.	If only portions of the document apply, have you clearly stated which			
	portions apply?			
3.	Are the documents cited really pertinent to the task? (If they are not,			
	they should not be included)			
4.	Do any standard specifications or paragraphs apply in whole or in part?			
	(If so, are they properly cited?)			
5.	Are documents referenced by:			
	Type (e.g., specification, code, etc.)			
	Number/version			
	• Title			
	Date			
6.	Have all directions to perform specific tasks, specification			
	requirements and deliverables been eliminated from this section?			
	(They belong in other sections of the SOS)			

	Item	Yes	No	N/A
F.	TECHNICAL REQUIREMENTS (SECTION 5.0): This section			
	should identify what the contractor is required to do and not how			
	the contractor should accomplish the effort. Technical			
	requirements are generally identified as major tasks and sub-			
	tasks. All major tasks and sub-tasks need to be defined in adequate			
	detail so that the contractor knows what is required and the			
	Agency knows when and if the contractor has complied with the			
	requirement(s). The SOS should identify the task, the desired			
	output and the associated performance standard or acceptance			
	criteria.			
1.	Are the contractor's responsibilities clearly defined/identified from the			
	introduction, scope and background sections?			
2.	Does the SOS identify only minimum requirements? (Have "nice to			
	haves" been eliminated?)			
3.	Are the tasks in the SOW presented in chronological order or some			
	logical order?			
4.	Is the SOS specific enough to permit you to estimate the probable cost			
	and the contractor to determine the levels of expertise, manpower and			
	other resources needed to accomplish the tasks?	ļ		
5.	Are sentences written so that there is no question of whether the			
	contractor is obligated to perform specific tasks? (e.g., "the contractor			
	shall do this work," not "this work shall be required")			
6.	Are contractor responsibilities stated in such a way that he/she knows			
	what is required and the Agency can tell whether the contractor has			
	complied?			
7.	Are the performance standards or acceptance criteria:			
	Necessary?			
	• Realistic?			
	• Specific?			
	• Verifiable?			
	Objective?			
	Measurable?			
8.	Have all elements of quality control and assurance been included			
	(inspection, testing and acceptance)?	ļ		
9.	Does the SOS identify the title of data or other deliverables in			
	parenthesis after the task which generated the data? [e.g. Contract Data			
1.0	Requirement List (CDRL) 001]	-		
10.	If the SOS requests data or reports, have all descriptions of that data			
	(e.g., format and content) been eliminated and subsequently included			
11	in Section 6.0 (CDRL) of the SOS?			-
11.	Have all solicitation instructions, evaluation criteria and references to			
	the bidder/proposer been deleted and included in the appropriate			
10	solicitation provisions of the RFP/IFB?	-		+
12.	Does the SOS identify significant contract milestones?	<u> </u>		
13.	Have all points of control or decision points, if applicable been			
1.4	included?	<u> </u>		
14.	Does the SOS require the contractor to get permission from, coordinate			
	with or provide something to someone in the Agency? (if so, have	<u> </u>		

Attachment PM15

	specific authorizations and instructions been provided to avoid		
	contractual problems)		
15.	If deliver/completion time is used, does it specify either calendar days		
	or work days and is it consistent throughout?		
16.	If Agency furnished property or services will be provided, are the		
	nomenclature, location and availability stated in the SOS?		
17.	Are requirements specified that are within state-of-the-art industry?		
18.	If brand name or equal descriptions are used, are the salient physical		
	and functional characteristics of the brand name included in the SOS		
	with at least two suggested brand name equivalents (brand name		
	justification must accompany the SOS)?		
19.	Are performance-type specifications (e.g., "at least 3 HP") used in		
	preference to design-type specifications, when appropriate?		
REMA	ARKS:		

	Item	Yes	No	N/A
G.	DELIVERABLES/CONTRACT DATA REQUIREMENTS LIST -			
	CDRL (SECTION 6.0): This section references the data (e.g.,			
	cost/progress reports, drawings, software, etc.) required to be			
	submitted by the contractor and referenced throughout the SOS			
	by a "CDRL" designation.			
1.	Are all contract data items (CDRLs) marked with "CDRL" and a			
	corresponding item number? (e.g., CDRL5-301)			
2.	Are the format and content of data items clearly defined?			
3.	Are the quantities and timelines for data delivery appropriately stated			
	and phased?			
4.	If alternate data deliveries may be proposed by the contractor, does the			
	SOS state this?			
5	Has the cost of the data required been considered and is it reasonable			
	for the specific work task that requires it?			
6.	If the contractor's format for data is acceptable, does the SOS mention			
	this fact?			
7.	Does the CDRL section contain a master contract data requirements			
	listing showing all required deliverables as an exhibit?			
REMA	ARKS:			

	Item	Yes	No	N/A
H.	GENERAL COMMENTS (Apply to most sections of the SOS):			
1.	Is the SOS written using the format recommended in this checklist? (If			
	not, provide rationale to the Procurement Department)			
2.	Does the SOS create an organizational conflict of interest?			
	 Will a specific contractor receive an unfair competitive 			
	advantage on this requirement or future requirements			
	based on its performance under past or present contracts?			
	(e.g., Is the SOS drafted whereby the contractor will			
	prepare an SOS which will be subsequently competitively			
	procured?)			
	Will the contractor be placed in a position where it cannot			
	provide impartial advice and assistance? (e.g., does the			
	SOS require the contractor to review its own work?)			
3.	Is more than one interpretation (throughout the SOS) possible? (See			
	Attachment 1 to this checklist for a list of phrases to be avoided)			
4.	Has the SOW been checked for spelling and grammar?			
5.	Are acronyms and abbreviations spelled out the first time they are used			
	and the abbreviated version put in parentheses?			
6.	Is the word "shall" used whenever a task or sub-task is mandatory?			
7.	Are tasks and sub-tasks written in the active voice rather than the			
	passive voice? (e.g., "The contractor shall establish a program" and not			
	"A program shall be established by the contractor")			
8.	Are paragraphs and subparagraphs numbered consecutively within			
	each SOS section using a period to separate the number representing			
	each sublevel?			
	For Example:			
	Requirement 5 1 st Sublevel 5.1			
	2 nd Sublevel 5.1.1			
	3 rd Sublevel 5.1.1.1			
9.	Are words used in the SOS that properly express the degree of			
7.	contractor involvement? (See Attachment 2 to this checklist for a list			
	of "work words" that might be appropriate for use in describing your			
	requirement))			
10.	Are sentences written in a short, simple and concise form?			
11.	Have you included revisions numbers in the footer of the SOS pages as			
	changes/edits were made to the SOS?			
12.	Have you provided the following information as appropriate to the s &			
	Procurement Department with this checklist and your SOS attached to			
	the Project Management Checklist?			
	 Independent cost estimate (ICE) 			
	 Disadvantaged Business Enterprise (DBE) Goal 			
	Proposed delivery schedule			
	 Proposed bid schedule 			
	Warranty information			
	 Method of payment(s) 			
	Justification for liquidated damages			

	_	Attao	chment PM15
	Brand name or sole source justification		
	 Proposed evaluation criteria for "best value solicitations" 		
	Proposed list of committee members for RFP		
	procurements		
	 Safety requirements (incorporate in Section 5 of SOS) 		
	Plans, drawings, geotechnical reports, etc.		
REMARKS:	, , , , , , , , , , , , , , , , , , , ,	1	

ATTACHMENT 1 - PHRASES HAVING MULTIPLE MEANINGS

This list of phrases having multiple meanings is provided as an example of those to be avoided.

- To the satisfaction of the Agency,
- As determined by the Agency,
- In accordance with instructions of the Agency,
- As directed by the Agency,
- In the opinion of the Agency,
- In the judgment of the Agency,
- Unless otherwise directed by the Agency,
- To furnish if requested by the Agency,
- All reasonable requests of the Agency shall be compiled with,
- Photographs shall be taken when and where directed by the Agency.
- In strict accordance with,
- In accordance with best commercial practice,
- In accordance with best modern standard practice,
- In accordance with the best engineering practice,
- Workmanship shall be of the highest quality,
- Workmanship shall be of the highest grade,
- Accurate workmanship,
- Securely mounted,
- Installed in a neat and workmanlike manner,
- Skillfully fitted,

ATTACHMENT 1 (CON'T) - PHRASES HAVING MULTIPLE MEANINGS

• Properly connected,

- Properly assembled,
- Good working order,
- Good materials,
- In accordance with applicable published specifications,
- Products of a recognized reputable manufacturer,
- Tests will be made unless waived,
- Materials shall be of the highest grade, free from defects or imperfections, and of grades approved by the Agency.
- Kinks and bends may be cause for rejection,
- Carefully performed,
- Neatly finished,
- Metal parts shall be cleaned before painting,
- Suitably housed,
- Smooth surfaces,
- Pleasing lines,
- Of an approved type,
- Of standard type,
- Any phrases referring to "The Agency Technical Representative (TR)".

ATTACHMENT 2 – WORK WORDS

The word list below is not complete but is provided to stimulate the thinking of the SOS writer by pointing out the critical differences in the meaning of work words versus the product words identified in connection with deliverable data. When selecting the key work word that properly expresses contractor's involvement, the SOS writer must define explicitly the total nature of the work requirement in terms of what is to be done. In some cases, the "why" or the application of the results of the performed work may be stated if it clarifies the requirement. The following sample list contains words which have the inherent value of work. This list is offered as a reminder of the various shades of meaning conveyed by choice of words.

analyze (solve by analysis)
annotate (provide with comments)
ascertain(find out with certainty)
attend (be present at)
audit (officially examine)
build (make by putting together)

calculate(find out by computation)
consider (think about, to decide)
construct (put together; build)
control (direct; regulate)
contribute (give along with others)
compare (find out likeness or differences)
create (cause to be; make)
determine (resolve; settle; decide)
differentiate (make a distinction between)

develop (bring into being or activity)

define (make clear; settle the limits)
design (perform an original act)
evolve (develop gradually, work out)
examine (look at closely; test quality of)

explore (examine for discovery)
extract (take out; deduce, select)
erect (put together; set upright)
establish(set up; settle; prove beyond dispute)

estimate (approximate an opinion of)
evaluate (find or fix the value of)
fabricate (build; manufacture, invent)
form (give shape to; establish)
formulate (to put together add express)
generate (produce, cause to be)
identify (to show or to find)

implement (to carry out, put into practice)
install (place; put into position)
inspect (examine carefully or officially)

ATTACHMENT 2 (CON'T) – WORK WORDS

institute (set up; establish, begin) interpret (explain the meaning of)

Attachment PM15

inquire (ask, make a search of)
integrate (to add parts to make whole)
investigate (search into; examine closely)
judge (decide; form an estimate of)
make (cause to come into being)

maintain (to keep in an existing state, to continue in, carry on)

manufacture (fabricate from raw materials)

modify (to change, alter)
monitor (to watch or observe)
notice (comment upon, review)

observe (inspect, watch)

originate (initiate, to give rise to)

organize (integrate, arrange in a coherent unit)

perform (do, carry out, accomplish)

plan (devise a scheme for doing, making, arranging activities to achieve

objectives)

probe (investigate thoroughly)
produce (give birth or rise to)

pursue (seek, obtain or accomplish)
reason (think, influence another's actions)
resolve (reduce by analysis, clear up)

record (set down in writing or act of electronic reproduction of communications)

recommend (advise, attract favor of)

review (inspection, examination or evaluation)

revise (to correct, improve)

study (careful examination or analysis)
seek (try to discover; make an attempt)
search (examine to find something)

scan (look through hastily, examine intently)

screen (to separate, present, or shield)

solve (find an answer) test (evaluate, examine)

trace (to copy or find by searching) track (observe or plot the path of) update (modernize, make current)