

ESTIMATED TIMED AGENDA

CALIFORNIA TRANSPORTATION COMMISSION

<http://www.catc.ca.gov>

December 7, 2016

Riverside, California

Wednesday, December 7, 2016

- 1:00 PM** **Commission Meeting**
Riverside County Administration Building
Supervisors' Chambers
4080 Lemon Street
Riverside, California 92501
- 5:00 PM** **Mobility 21 Reception**
Riverside County Administration Building
Atrium
4080 Lemon Street
Riverside, California 92501
- 7:00 PM** **Commissioners' Dinner**
Duane's Prime Steak and Seafood
3649 Mission Inn Avenue
Riverside, California 92501

To view the live webcast of this meeting, please visit: <http://ctc.dot.ca.gov/webcast>

NOTICE: Times identified on the following agenda are estimates only. The Commission has the discretion to take up agenda items out of sequence and on either day of the two-day meeting, except for those agenda items bearing the notation "TIMED ITEM." TIMED ITEMS which may not be heard prior to the Time scheduled but may be heard at, or any time after the time scheduled. The Commission may adjourn earlier than estimated on either day.

A copy of this meeting notice and agenda will be posted 10 days prior to the meeting and related book items will be posted 5 days prior to the meeting on the California Transportation Commission Website: www.catc.ca.gov

Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. If any special accommodations are needed for persons with disabilities, please contact Doug Remedios at (916) 654-4245. Requests for special accommodations should be made as soon as possible but at least five days prior to the scheduled meeting.

Persons attending the meeting who wish to address the California Transportation Commission on a subject to be considered at this meeting are asked to complete a Speaker Request Card and give it to the Executive Assistant prior to the discussion of the item. If you would like to present handouts/written material to the California Transportation Commission at the meeting, please provide a minimum of 25 copies labeled with the agenda item number.

* "A" denotes an "Action" item; "I" denotes an "Information" item; "C" denotes a "Commission" item; "D" denotes a "Department" item; "F" denotes a "U.S. Department of Transportation" item; "R" denotes a Regional or other Agency item; and "T" denotes a California Transportation Agency (CalSTA) item.

FREQUENTLY USED TERMS: California Transportation Commission (Commission or CTC), California Department of Transportation (Department or Caltrans), Regional Improvement Program (RIP), Interregional Improvement Program (IIP), State Transportation Improvement Program (STIP), State Highway Operation and Protection Program (SHOPP), Traffic Congestion Relief Program (TCRP), Public Transportation Account (PTA), Clean Air and Transportation Improvement Act of 1990 (Proposition 116), High Speed Passenger Train Bond Program (Proposition 1A), Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B), Corridor Mobility Improvement Account (CMIA), State Route 99 Bond Program (RTE or SR 99), Local Bridge Seismic Retrofit Account (LBSRA), Trade Corridors Improvement Fund (TCIF), Highway-Railroad Crossing Safety Account (HRCSA), State-Local Partnership Program (SLPP), Traffic Light Synchronization Program (TLSP), Letter of No Prejudice (LONP), Environmental Phase (PA&E), Design Phase (PS&E), Right of Way (R/W), Fiscal Year (FY), Active transportation Program (ATP), Intercity Rail(ICR), California Aid to Airports Program (CAAP), Acquisition & Development (A&D).

NEXT REGULARLY SCHEDULED CTC MEETING (Subject to Change):
CTC Meeting – January 18-19, 2017 in Sacramento, CA

Tab #	Item Description	Ref. #	Presenter	Status*	
GENERAL BUSINESS					
1	Roll Call	1.1	Bob Alvarado	I	C
2	Welcome to the Region	1.12	John Tavaglione Anne Mayer Ray Wolfe	I	R
3 8 Ayes	Resolution of Necessity – Written Appearance --06-Ker-99-PM 44.23 Roscoe Moss Manufacturing Inc., a California Corporation	2.4a.	Rick Guevel Jennifer S. Lowden	A	D
4	Approval of Minutes for October 19-20, 2016	1.2	Bob Alvarado	A	C
5	Commissioners' Meetings for Compensation	1.5	Bob Alvarado	A	C
REPORTS					
6	Executive Director's Report	1.3	Susan Bransen	A	C
7	Commission Reports	1.4	Bob Alvarado	A	C
8	CalSTA Secretary and/or Undersecretary	1.6	Brian Kelly	I	T
9	Caltrans Director and/or Deputy Director	1.7	Malcolm Dougherty	I	D
10	FHWA California Division Administrator	1.11	Vincent Mammano	I	F
11	Regional Agencies Moderator	1.8	Melissa Garza	I	R
12	Rural Counties Task Force Chair	1.9	Maura Twomey	I	R
13	Self-Help Counties Coalition Chair	1.10	Dianne Steinhauser	I	R
POLICY MATTERS					
14	Innovations in Transportation: Cubic - Delivering Customer Focused Solutions with New Technologies.	4.7	Garth Hopkins Larry Yermack	I	C
15	American Public Transportation Association Update	4.6	Garth Hopkins Doran Barnes	I	C
16	State and Federal Legislative Matters	4.1	Eric Thronson	A	C
17	Budget and Allocation Capacity	4.2	Eric Thronson Steven Keck	I	D
18	Road Charge Technical Advisory Committee and Pilot Program Update	4.3	Mitch Weiss	I	C
19	Development of California Freight Investment Program Guidelines for National Highway Freight Formula Funds and Relief Loan Repayment Funds	4.11	Dawn Cheser	I	C
20	Adoption of 2017 Active Transportation Program – Statewide and Small Urban & Rural Components	4.8	Laurie Waters	A	C
21 2:00pm	Southern California Workshop – Final Draft Regional Transportation Plan Guidelines for MPOs and RTPAs	4.16	Garth Hopkins	I	C
22	Caltrans' Interim Guidance for Local Development/ Intergovernmental Review (LD/IGR)	4.12	Garth Hopkins Alyssa Begley	A	C/D
23	Caltrans' Response to the Statewide Tree Mortality Issue – Short and Long Term Strategies	4.4	Rick Guevel Tony Tavares	I	D
24	2017 State Highway System Management Plan	4.13	Rick Guevel Mike Johnson	I	D
25	Proposition 1B Bond Program Project Benefits	4.14	Dawn Cheser Bruce DeTerra	I	D
INFORMATION CALENDAR					
26	Informational Reports on Allocations Under Delegated Authority --Emergency G-11 Allocations (2.5f.(1)): \$16,250,000 for ten projects --SHOPP Safety Sub-Allocations (2.5f.(3)): \$43,838,000 for eight projects --Minor G-05-16 Allocations (2.5f.(4)): \$1,071,000 for two projects	2.5f.		I	D
Reports for Projects that have been Allocated but not Awarded:					
27	State Highway Projects	3.2a.		I	D
28	Local Assistance STIP Projects	3.2b.		I	D
29	Local Assistance ATP Projects	3.2c.		I	D

Tab #	Item Description	Ref. #	Presenter	Status*	
<u>Quarterly Report: First Quarter – Fiscal Year 2016-17</u>					
30	Proposition 1A – High Speed Passenger Train Bond Program	3.4		I	D
31	Caltrans Rail Operations	3.5		I	D
32	Caltrans Finance Report	3.10		I	D
<u>Other Reports</u>					
33	Local Assistance Lump Sum Allocation for the period ending September 30, 2016	3.3		I	D
34	Balance Report on AB 1012 “Use It or Lose It” Provisions for FFY 2014 Unobligated CMAQ and RSTP Funds	3.6		I	D
35	Notification of AB 1012 “Use It or Lose It” Provision for FFY 2015 Unobligated CMAQ and RSTP Funds	3.7		I	D
36	Local and Regional Agency Notices of Intent to Expend Funds on STIP Projects Prior to Commission Allocation per SB 184	3.9		I	C

Tab #	Item Description	Ref. #	Presenter	Status*	
	BEGIN CONSENT CALENDAR		Rick Guevel		
37	<p><u>Approval of Projects for Future Consideration of Funding:</u> 02-Sha-5, PM R3.8/R11.7 Redding to Anderson 6-Lane Project Construct roadway improvements on a portion of Interstate 5 in Shasta County. (ND) (PPNOs 03445A and 03445B) (STIP)</p> <p>03-Nev-80, PM 18.3/19.3 Nevada-80 Water Supply Pipeline for Truckee CHP Inspection Station Install a water supply line to an existing CHP Inspection Station on Interstate 80 in Nevada County. (ND) (PPNO 4295) (SHOPP)</p> <p>03-Nev-174, PM 2.7/4.6 Nevada 174 Highway Realignment Project Realign a portion of SR 174 in Nevada County. (MND) (PPNO 4451) (SHOPP)</p> <p>03-Col-20, PM 31.8/32.8 Colusa Rehabilitation Project Construct roadway improvements on a portion of SR 20 in Colusa County. (ND) (PPNO 2950) (SHOPP)</p> <p>05-Mon-1, PM 72.3/72.9 State Route 1/Rio Road to Carmel Valley Road Operational Improvement Project Construct roadway improvements on a portion of SR 1 in Monterey County. (MND) (PPNO 1814) (STIP)</p> <p>05-SCr-17, PM 0.2/0.5 Pasatiempo Shoulder Widening Widening existing shoulders on a portion of SR 17 in Santa Cruz County. (MND) (PPNO 2422) (SHOPP)</p> <p>05-SLO-101, PM 16.4 Pismo Creek Scour Repair Project Repair scour damage on an existing bridge on SR 101 in San Luis Obispo County. (MND) (PPNO 2387) (SHOPP)</p> <p>06-Ker-99, PM 23.6/28.4 Bakersfield 99 Rehabilitation Project Construct roadway improvements on a portion of SR 99 in Kern County. (MND) (PPNO 6661) (SHOPP)</p> <p>06-Kin-41, PM 34.4/35.0 Kansas Avenue Intersection Improvement Project Construct intersection improvements on SR 41 at Kansas Avenue in Kings County. (ND) (PPNO 6734) (SHOPP)</p> <p>08-SBd-395, PM 35.5/39.1 US Highway 395 Widen Median and Shoulder and Install Rumble Strips Project Construct roadway improvements on a portion of US 395 in San Bernardino County. (MND) (PPNO 0388P) (SHOPP)</p>	2.2c.(1)		A	D
38	<p><u>Approval of Project for Future Consideration of Funding:</u> 10 – San Joaquin County River Road Intersection and Sidewalk Improvement Project. Construct intersection improvements (i.e., sidewalk, traffic signal, landscaping, etc.). (ND) (PPNO 3210) (ATP) <i>(Related item under Ref. 2.5w.(1))</i></p>	2.2c (2)		A	C

Tab #	Item Description	Ref. #	Presenter	Status*	
39	<p><u>Approval of Project for Future Consideration of Funding:</u> 06 – Fresno County Fresno Bus Rapid Transit (BRT) Project. Construct a 15.7-mile Bus Rapid Transit (BRT) in the City of Fresno. (MND) (PPNO CP016) (TCRP) <i>(Related Item under Ref. 2.6g.(1))</i></p>	2.2c (3)		A	C
40	<p><u>Five Relinquishment Resolutions -</u> --04-SCI-101-PM 50.7/51.2 Right of way along Route 101 on East Bayshore Road, in the city of Palo Alto. --08-SBd-215-PM 5.0/9.5 Right of way along Route 215 from Auto Center Road to Massachusetts Avenue, in the city of San Bernardino. --11-SD-125-PM-13.5/14.0, 11-SD-94-PM 10.5/10.8 Right of way along Route 125 on Bowling Green Drive and Echo Drive and along Route 94 on Panorama Drive, in the city of La Mesa. --11-Imp-86-PM 8.8/12.3 Right of way on Route 86 (Imperial Avenue) between the south and north city boundaries, in the city of Imperial. --12-Ora-5-PM 8.3/8.6 Right of way along Route 5 on Camino Capistrano, in the city of San Juan Capistrano.</p>	2.3c.		A	D
41	<p><u>One Vacation Resolution:</u> --07-LA-1-PM 41.1/41.7 Right of way along Route 1 from 0.4 mile west of Tuna Canyon Road to 0.2 mile east of Tuna Canyon Road, in the city of Malibu.</p>	2.3d.		A	D
42 8 Ayes	<p>11 Resolutions of Necessity --Resolutions C-21497 through C-21507</p>	2.4b.		A	D
43	<p>Director’s Deeds --Items 1 through 11 Excess Lands - Return to State: \$5,585,200 Return to Others: \$0</p>	2.4d.		A	D
44	<p>Request to de-allocate \$215,980 in Proposition 1B TFA construction from the North Old Stage Road Project in Siskiyou County, due to savings at project closeout. (PPNO 2300)</p>	2.5g.(3)		A	D
45	<p>Request to amend Resolution TIRCP-1516-05 to clarify the project scope of the San Joaquin Regional Transit District’s Bus Rapid Transit Expansion – MLK and Crosstown Miner Corridors project, in San Joaquin County.(PPNO CP011)</p>	2.6g.(2)		A	D
46	<p>Rescind \$432,000 in Aeronautic – Acquisition & Development funding from the Ruth Airport, in Trinity County, originally allocated under Resolution FDOA-2014-07. (Tri-7-14-07) <i>(Related Item under Ref. 2.7a.)</i></p>	2.7c.(1)		A	D
47	<p>Rescind \$88,000 in supplemental Aeronautic – Acquisition & Development funding from the Ruth Airport, in Trinity County, originally allocated under Resolution FDOAS-2016-01. (Tri-7-14-07) <i>(Related Item under Ref. 2.7a.)</i></p>	2.7c.(2)		A	D
48	<p><u>Technical Correction – STIP PPM:</u> Correct the PPNO under Resolution FP-16-03 for Project 14 – MTC’s Planning, Programming and Monitoring project for San Mateo County.</p>	2.9		A	D
END OF CONSENT CALENDAR					

Tab #	Item Description	Ref. #	Presenter	Status*	
Environmental Matters					
49	<u>Approval of Projects for Future Consideration of Funding:</u> 03-Pla-80, PM 1.9/6.1, 03-Pla-65, PM R4.8/R7.3 I-80/SR 65 Interchange Improvement Project Construct interchange and roadway improvements on Interstate 80 at SR 65 in Placer County. (FEIR) (PPNOs 6913A and 5108) (SHOPP)	2.2c.(4)	Garth Hopkins Katrina Pierce	A	D
50	<u>Approval of Project for Future Consideration of Funding:</u> 04 – Santa Clara/San Francisco Counties Peninsula Corridor Electrification Project. Electrify the Caltrain Corridor from 4th/King Caltrain Station to the Tamien Caltrain Station. (FEIR) (TIRCP)	2.2c.(5)	Garth Hopkins	A	C
PROGRAM UPDATES					
51	Amendment to the FY 2016-17 State Transportation Improvement Program Policy on Advance Project Allocations.	4.17	Mitch Weiss	A	C
52	Amendment to the FY 2016-17 Active Transportation Program Policy on Project Amendments and Advance Project Allocations.	4.19	Laurie Waters	A	C
53	<u>ATP Amendment for Approval:</u> The Town of Paradise proposes to amend the Cycle 1, Active Transportation Program, Person Rd SR2S Connectivity project, to revise the project scope. (PPNO 1018)	4.9	Laurie Waters Rihui Zhang	A	D
54	<u>ATP Amendment for Approval:</u> The City of Laguna Hills proposes to amend the Cycle 1, Active Transportation Program, La Paz Sidewalk Widening Project to remove scope from the project. (PPNO 2170I)	4.10	Laurie Waters Rihui Zhang	A	D
Amendment of the 2015 Active Transportation Program MPO Competitive Component for the Southern California Association of Governments					
55	The Southern California Association of Governments proposes to program an additional \$225,000 in Active Transportation Program (ATP) funds for the PA&ED phase of the Orange County OC Loop Coyote Creek project (PPNO 1005) in Orange County.	4.18	Laurie Waters Rihui Zhang	A	C
PROJECT BUSINESS MATTERS					
SHOPP Program Amendments for Approval:					
56	Request to: --Add 21 new projects into the 2016 SHOPP --Revise 26 projects currently programmed in the 2016 SHOPP.	2.1a.(1)	Rick Guevel Bruce De Terra	A	D
STIP Amendment for Notice					
57	The City of Elk Grove and the Sacramento Area Council of Governments are proposing to program an AB 3090 cash reimbursement project (PPNO 1667A) and use local funds for construction of the ITS Master Plan - Phase 4 Implementation project (PPNO 1667) in Sacramento County, with later reimbursement in FY 2019-20.	2.1b.	Mitch Weiss Bruce De Terra	I	D
TCRP Amendments for Action					
58	The Department and the Alameda County Transportation Commission propose to amend the Tier 1 - TCRP Project 4.0 (Sunol Grade HOV Corridor-Southbound project (PPNO A0157D) and the Sunol Grade Sabercat Mitigation for Southbound HOV (PPNO 0157M) to revise the project funding plan and re-allocate previously allocated funds.	2.1a.(2)/ 2.5t.(1)	Dawn Cheser Bruce De Terra	A	D
Proposition 1B Bond Program Amendment					
59	<u>Trade Corridors Improvement Fund Baseline Amendment:</u> Project 15 – San Gabriel Valley Grade Separation Program in Los Angeles County. (PPNO TC15)	2.1c.(5)	Dawn Cheser Rihui Zhang	A	D

Tab #	Item Description	Ref. #	Presenter	Status*	
<u>ALLOCATIONS</u>					
<u>PUC Set-Aside Allocations</u>					
60	Proposed FY 2017-18 Allocation Set-Aside for the PUC Railroad Grade Crossing Protection Maintenance Program.	4.5	Dawn Cheser	A	C
<u>SHOPP Allocations</u>					
61	Request of \$190,038,000 for 10 SHOPP projects.	2.5b.(1)	Rick Guevel Bruce De Terra	A	D
<u>STIP Allocations</u>					
62	Request of \$8,058,000 for two State administered STIP projects, on the State Highway System.	2.5c.(1)	Mitch Weiss Bruce De Terra	A	D
63	Request of \$832,000 for four locally administered STIP projects, off the State Highway System. 2.5c.(3a) -- \$190,000 for one STIP projects. 2.5c.(3b) -- \$642,000 for three STIP Planning, Programming, and Monitoring projects.	2.5c.(3)	Mitch Weiss Bruce De Terra	A	D
<u>Supplemental Request - Allocations for Capital Outlay Support</u>					
64	Request of \$23,200,000 in additional funds for construction support and \$1,700,000 for right of way support for the Schuyler Heim Bridge Replacement project on Route 47 in Los Angeles County. This results in an increase of 6.4 percent in construction support and 0.5 percent in right of way support, over the current project budget. (PPNO 0444E)	2.5e.(1)	Rick Guevel Carrie Bowen	A	D
65	<u>Approval of Additional Capital Outlay Support for SHOPP:</u> 1) Request \$1,887,000 in additional programming for the Project Approval and Environmental Document phase of the Lagunitas Creek Bridge replacement SHOPP project (PPNO 0756K) on Route 1 in Marin County. (Resolution FA-16-11). 2) Request of \$2,000,000 in additional programming for the Construction Support phase for the San Francisco Oakland Bay Bridge Maintenance Complex Warehouse replacement SHOPP project (PPNO 0063L) on Route 80 in Alameda County. (Resolution FA-16-12)	2.5e.(2)	Rick Guevel Bijan Sartipi	A	D
<u>Lump Sum - Proposition 1B LBSRA Allocation</u>					
66	Request of \$9,793,335 in Proposition 1B Local Bridge Seismic Retrofit Program Bond Lump Sum for Federal Fiscal Year 2016-17.	2.5g.(4)	Rick Guevel Rihui Zhang	A	D
<u>TCRP Project Allocations for Tier 2 Projects</u>					
67	Request of \$500,000 for State administered TCRP Project 4 – Sunol Grade HOV Corridor-Southbound, in Alameda County, on the State Highway System. (PPNO A0157J)	2.5t.(2a)	Dawn Cheser Bruce De Terra	A	D
68	Request of \$774,000 for two locally administered TCRP Rail projects.	2.5t.(2b)	Dawn Cheser Bruce De Terra	A	D
<u>Active Transportation Program (ATP) Project Allocations</u>					
69	Request of \$30,425,000 for 39 Active Transportation Program projects. <i>(Related item under Ref. 2.2c.(2))</i>	2.5w.(1)	Laurie Waters Rihui Zhang	A	D
<u>Advance - Active Transportation Program (ATP) Projects</u>					
70	Request of \$1,190,000 for the Active Transportation Resources Center (ATRC) project, programmed in FY 17-18, in various counties. (PPNO 0774)	2.5w.(2)	Laurie Waters Rihui Zhang	A	D
<u>Transit & Intercity Rail Capital Program (TIRCP)</u>					
71	Letter of No Prejudice: Transit and Intercity Rail Capital Program - Peninsula Corridor Electrification Project.	2.1c.(10)	Mitch Weiss Bruce Roberts	A	D

Tab #	Item Description	Ref. #	Presenter	Status*	
<u>Transit & Intercity Rail Capital Program (TIRCP) Project Allocations</u>					
72	Request of \$4,083,000 for the locally administered Transit and Intercity Rail Capital Program Metropolitan Rapid Transit and Rail Connectivity Project, in Fresno County.(PPNO CP016) <i>(Related Items under Ref. 2.2c.(3))</i>	2.6g.(1)	Mitch Weiss Bruce Roberts	A	D
<u>Aeronautics Project Allocations</u>					
73	Request of \$499,000 for the Baker Airport Rehabilitation Runway project in San Bernardino County. (SBD-38-16-1) <i>(Related Items under Ref. 2.7c.(1) & 2.7c.(2))</i>	2.7a.	Dawn Cheser Gary Cathey	A	D
<u>TIME EXTENSION REQUESTS</u>					
<u>Contract Award Time Extension</u>					
74	Request to extend the period of contract award for nine locally administered ATP projects, per ATP Guidelines.	2.8b.(1)	Laurie Waters Rihui Zhang	A	D
75	Request to extend the period of contract award for the City of Galt's C Street/Central Galt Complete Streets project in Sacramento County, per STIP Guidelines. (PPNO 6576)	2.8b.(2)	Laurie Waters Rihui Zhang	A	D
76	Request to extend the period of contract award for three SHOPP projects, per STIP Guidelines.	2.8b.(3)	Rick Guevel Bruce De Terra	A	D
77	Request to extend the period of contract award for the Orange Transportation Center Parking Structure project in Orange County, per STIP Guidelines. (PPNO 9657)	2.8b.(4)	Mitch Weiss Bruce Roberts	A	D
78	Request to extend the period of contract award for the Willowbrook/Rosa Parks Station and Blue Line Light Rail Operational Improvement project in Los Angeles County, per TIRCP Guidelines.	2.8b.(5)	Mitch Weiss Bruce Roberts	A	D
79	Request to extend the period of contract award for the Bus Rapid Transit Expansion – MLK and Crosstown Miners Corridors project in San Joaquin County, per TIRCP Guidelines.	2.8b.(6)	Mitch Weiss Bruce Roberts	A	D
<u>Project Completion Time Extension</u>					
80	Request to extend the period of project completion for the Stockton to Escalon Double Track project (Segment 3), in San Joaquin County, per STIP Guidelines. (PPNO 2030A)	2.8c.	Mitch Weiss Bruce Roberts	A	D
<u>OTHER MATTERS / PUBLIC COMMENT</u>					
6.					
<u>ADJOURN</u>					

<u>Highway Financial Matters</u>	
\$ 190,038,000	Total SHOPP/Minor Requested for Allocation
\$ 8,890,000	Total STIP Requested for Allocation
\$ 1,274,000	Total Proposition 1B Bond Requested for Allocation
\$ 9,793,335	Total Supplemental Funds Requested for Allocation
\$ 31,615,000	Prop 1B LBSR Lump Sum
\$ 28,787,000	Supplementals (Includes ATP)
\$ 270,397,335	Sub-Total Project Funds Requested for Allocation
\$ 61,159,000	Delegated Allocations
\$ 331,556,335	Sub-Total, Highway Project Allocations
\$ 331,556,335	Total Value
5,968	Total Jobs Created: <i>(Includes Direct, Indirect, and Induced)</i>
\$ 215,980	De-Allocation/Project Savings
\$ 215,980	Total De-Allocation

Tab #	Item Description	Ref. #	Presenter	Status*
Mass Transportation Financial Matters				
	\$ 4,083,000 TIRCP (Cap and Trade)			
	\$ 499,000 A&D Projects			
	\$ 4,852,000 Total Value			
	\$ 520,000 De-Allocations/Project Savings			
	\$ 520,000 Total De-Allocation			
	82 Total Jobs Created: <i>(Includes Direct, Indirect, and Induced)</i>			