Table IV-1. Proposed Action (Alternative 1) – Exploration and Development Scenario for the Gulf of Mexico

Scenario Elements	Gulf of Mexico
Number of Sales	11
Years of Activity	40
Oil (Bbbl)	4-8
Gas (tcf)	25-40
Platforms	400-500
Exploration and Delineation Wells	800-1,500
Development and Production Wells	4,000-6,000
Miles of New Pipelines	4,000
Vessel Trips/Week	400-500
Helicopter Trips/Week	3,000-5,000
New Pipeline Landfalls	6
New Pipe yards	3
New Gas Processing Facilities	6
Platform Removals with Explosives	700
Drill Muds/Well (bbl)	
Exploration/Delineation	7,860
Development/Production	5,800
Drill Cuttings/Well (bbl)	
Exploration/Delineation	2,680
Development/Production	1,630
Produced Water/Well (bbl)	
Oil Well	450
Gas Well	68
Bottom Area Disturbed (ha)	
Platforms	750
Pipelines	6,000

Table IV-2. Proposed Action (Alternative 1) – Exploration and Development Scenario for Alaska

	Arctic Subregion	Bering Sea Subregion	South Alaska Subregion
Scenario Elements	Beaufort Sea Chukchi Sea	North Aleutian Basin	Cook Inlet
Number of Sales	5	2^{a}	2 ^b
Years of Activity	40	40	40
Oil (Bbbl)	0.5-2.0	0.1-0.2	0.1-0.2
Gas (tcf)	None	5	0.1-0.2
Platforms	3-10	4-6	1-2
Exploration and Delineation Wells	Up to 30	Up to 20	Up to 10
Development and Production Wells	100 - 400	Up to 200	Up to 100
Miles of New Offshore Pipelines	Up to 200	Up to 150	Up to 125
Miles of New Onshore Pipelines	Up to 400	Up to 50	Up to 75
Vessel Trips/Week/Platform	1-3°	1-3	1-3
Helicopter Trips/Day/Platform	1-3	1-3	1-3
New Pipeline Landfalls	1-3	1-2	1-2
New Shore Bases	1-2	1	0
New Waste Facilities	0-1	1	0-1
New Processing Facilities	0-1	1	0-1
Docks/Causeways	1	1	0
Exploration Well Muds,	425 tons dry mud	360 tons dry mud,	360 tons dry mud,
Cuttings, Produced Water	with 80% recycled;	with 80% recycled;	with 80% recycled;
	525 tons dry rock	450 tons dry rock	450 tons dry rock
	cuttings, totaling 610	cuttings; totaling 522	cuttings; totaling 522
	tons discharged at each well site	tons per site	tons per site
Development Wells Muds,	All muds, cuttings	All muds, cuttings	All muds, cuttings
Cuttings, Produced Water	and produced water treated and disposed of in wells	and produced water discharged down hole	and produced water discharged down hole

^a Sales in the North Aleutian Basin will require that the existing presidential withdrawal is lifted prior to the sales.

b Lease sales in the Cook Inlet Planning Area will be special interest sales, meaning that a sale will not occur unless industry expresses interest in responses to the call for information.

^c In the Arctic Subregion, service vessel trips will only occur during open-water and broken-ice conditions.

Table IV-3. Proposed Action (Alternative 1) – Exploration and Development Scenario for the Atlantic

Scenario Elements	Atlantic
Number of Sales ^a	1
Years of Activity	40
Oil (Bbbl)	0.05-0.08
Gas (tcf)	0.25-0.50
Platforms	1
Exploration and Delineation Wells	10-15
Development and Production Wells	8-12
Miles of New Pipelines	25-75
Vessel Trips/Week	1-5
Helicopter Trips/Week	5-10
New Pipeline Landfalls	1
New Pipe Yards	1
New Gas Processing Facilities	1
Platform Removals with Explosives	0
Drill Muds/Well (bbl)	
Exploration/Delineation	7,860
Development/Production	5,800
Drill Cuttings/Well (bbl)	
Exploration/Delineation	2,680
Development/Production	1,630
Produced Water/Well (bbl)	
Oil Well	450
Gas Well	68
Bottom Area Disturbed (ha)	
Platforms	2-5
Pipelines	50-125

^a In order for a lease sale to occur in the area offshore Virginia, the current Presidential withdrawal will have to be lifted, and the congressional moratorium will have to be discontinued. The sale offshore Virginia will be a special interest sale, meaning that even if the Presidential withdrawal and congressional moratorium end, the sale will not occur unless industry expresses interest in response to a call for information.

Table IV-4. The Proposed Action (Alternative 1) – Oil-Spill Assumptions

		,	•		
		Arctic	Bering Sea	South Alaska	
	Gulf of Mexico	Subregion	Subregion	Subregion	Atlantic
	Central and	Beaufort and	North Aleutian		
Scenario Elements	Western Gulf	Chukchi Seas	Basin	Cook Inlet	Virginia
Oil Production (Bbbl)	4 - 8	0.5 - 2.0	0.1 - 0.2	0.1 - 0.2	80.0 - 20.0
Large Spills $\geq 1,000$ bbl ^a					
Pipeline Spills	4	1	1 b	1 b	1 c
Platform Spills	4	1			
Tanker Spills	1				
Small Spills					
50 - 999 bbl	50	10	2	2	1 - 2
< 50 bbl	550	100	10	10	5 - 10

^a Large spill sizes: pipeline – 4,600 bbl; platform – 1,500 bbl; tanker (Gulf of Mexico) – 5,300 bbl; tanker (west coast) – 7,800 bbl

^b Spill in Cook Inlet and North Aleutian Basin occurs from either a platform or a pipeline. North Aleutian Basin spill will be condensate and/or light crude.

^c Atlantic spill will be a 1,500-bbl spill from a tanker or barge.

Table IV-5. Projected Greenhouse Gas Emissions from Proposed 2007-2012 Leasing Program

		Total 2003	
		U.S. Emissions,	2007-2012 Program
	2007-2012 Program,	All Sources,	as Percentage of
Emission	Tg ^a CO ₂ Equivalent	Tg ^a CO ₂ Equivalent	Total U.S. Emissions
CO_2	3.41-6.88	5,842	0.058-0.118
CH_4	2.36-4.44	545	0.433-0.816
$CO_2 + CH_4$	5.77-11.33	6,387	0.090-0.177
All GHG ^b	5.77-11.33	6,891 ^b	0.084-0.164

Table IV-6. Estimated Air Emissions from OCS Activities in the Gulf of Mexico, **Proposed 2007-2012 Leasing Program**

	Pollutant (tons/yr)				
Activity	NO_x	SO_2	PM_{10}	СО	voc
Production Platforms	14,982-29,964	666-1,333	151-303	17,688-35,376	11,428-22,857
Exploration Wells	3,238-6,071	546-1,024	80-151	340-638	31-59
Platform Construction/Removal	1,417-1,925	241-328	35-48	176-240	18-25
Pipelaying Vessels	6,653	1,117	166	697	63
Support Vessels	5,539-6,923	946-1,183	138-173	715-894	74-92
Survey Vessels	15-18	2-3	0.4-0.5	1-2	0.1
Helicopters	141-176	17-22	10-13	592-740	223-279
Tanker/Barge Transport	422-844	72-145	11-22	70-141	343-686
Total	32,406-52,575	3,609-5,154	593-876	20,280-38,727	12,182-24,061

^a One teragram (Tg) equal 10¹² g or 10⁶ metric tons.
^b Total U.S. greenhouse gas (GHG) emissions also include nitrous oxides, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride emissions. Estimates of emissions from the 2007-2012 Program were not made for these compounds, but they are assumed to be very small.

Table IV-7. Proposed Action (Alternative 1) -Direct, Indirect, and Induced Employment and Income Projections, Gulf of Mexico Economic Impact Areas (EIA's)

	Total Empl	ployment	Average Yearly Employment	Yearly yment	Total Personal Income (\$millions)	nal Income ions)	Average Yearly Personal Income (\$millions)	Yearly Income ions)
Area	Low	High	Low	High	Low	High	Low	High
Alabama EIA	16,500	28,000	410	700	099	1,110	15	30
Mississippi EIA	14,000	23,000	350	575	410	069	10	15
Florida EIA	54,500	90,500	1,350	2,250	1,760	2,930	45	75
Louisiana EIA	404,500	686,000	10,100	17,150	15,420	26,130	385	655
Texas EIA	321,000	560,000	8,050	14,000	15,990	27,910	400	700
Total EIA's ^a	810,500	1,387,500	20,250	34,700	34,250	58,760	855	1,470
Other Gulf of Mexico	337,500	554,500	8,450	13,850	14,040	23,000	350	575
Rest of United States	634,500	1,093,000	15,850	27,325	29,660	51,100	740	1,280

^a Totals may not add due to rounding.

All estimates are totals of direct, indirect, and induced impacts. Employment estimates are in employee years.

Personal income estimates are in millions of 2007 dollars

Table IV-8. Estimated Air Emissions from OCS Activities in the Arctic Subregion,

Proposed 2007-2012 Leasing Program

	Pollutant (tons/yr)				
Activity	NO _x	SO_2	PM_{10}	СО	VOC
Production Platforms	665	31	43	530	265
Exploration Wells	3,413-10,239	136-409	129-387	521-1,563	180-540
Platform Construction/Removal	821-1,642	66-131	58-117	184-368	65-129
Pipelaying Vessels	496-992	42-84	36-71	113-227	38-77
Support Vessels	17-172	3-29	0-4	2-23	0-3
Helicopters	1-11	0-1	0-1	5-48	2-18
Tanker Transport	869-2,896	149-497	22-75	154-514	27-91
Total	6,282-18,450	427-1,262	289-808	1,510-4,557	577-1,748

Table IV-9. Estimated Air Emissions from OCS Activities in the Bering Sea Subregion,

Proposed 2007-2012 Leasing Program

110p03cu 2007 2012 Ec	wsg - 1 0 g - w	11051111				
		Pollutant (tons/yr)				
Activity	NO _x	SO ₂	PM ₁₀	со	VOC	
Production Platforms	1,969	88	20	2,325	1,502	
Exploration Wells	213-427	36-72	5-11	22-45	2-4	
Platform Construction/Removal	144	24	4	17	2	
Pipelaying Vessels	416-554	70-93	10-14	44-58	4-5	
Support Vessels	61-275	10-47	2-7	8-37	1-6	
Helicopters	2-7	0.2-1	0.1-0.5	29	2-11	
Total	2,805-3,376	228-324	41-55	2,422-2,510	1,513-1,529	

Table IV-10. Estimated Air Emissions from OCS Activities in the South Alaska Subregion,

Proposed 2007-2012 Leasing Program

	Pollutant (tons/yr)				
Activity	NO_x	SO ₂	PM_{10}	со	VOC
Production Platforms	193-386	10-19	13-27	172-344	96-202
Exploration Wells	213-427	36-72	5-11	22-45	2-4
Platform Construction/Removal	144	24	4	17	2
Pipelaying Vessels	554-924	93-155	14-23	58-97	5.3-9
Support Vessels	123-246	21-42	3-6.1	17-35	2-3.7
Helicopters	2-4	030.6	0.2-0.3	10-19	4-7
Total	1,230-2,131	184-313	39-71	296-556	110-228

Table IV-11. Proposed Action (Alternative 1) – Alaska Employment and Income Forecasts ^a

		Personal Income b
Planning Area & Geographic Area	Employment	(\$million)
Arctic (Beaufort and Chukchi-NSB)		
Total-All Years	23,000	680
Average Year	1,000	32
Bering (North Aleutian Basin-AEB)		
Total-All Years	11,500	340
Average Year	500	16
South Alaska (Cook Inlet-KPB)		
Total-All Years	5,750	170
Average Year	250	8
Rest of Alaska		
Total-All Years	140,000	4,200
Average Year	12,600	192
Rest of United States		
Total-All Year	266,000	9,800
Average Year	11,900	455

^a All estimates are totals of direct, indirect, and induced impacts. For each planning area, the first set of estimates is of the total of all years over the life of the activity (employment or personal income); the second row is the average yearly forecast for the local area. For Rest of Alaska and Rest of United States, the forecasts are the total of all planning areas in the first row and the average per year in the second row ^b Personal income estimates are in millions of 2007 dollars. Personal income is the sum of labor income and

income of individual business owners.

NSB = North Slope Borough KPB = Kenai Peninsula Borough AEB = Aleutians East Borough

 $Table\ IV\textbf{-12.}\ \ Proposed\ Action\ (Alternative\ 1)-Alaska\ Direct,\ Indirect,\ and\ Induced$

Employment and Income, Total All Years

Employment and meome, Total 7th Tears		Personal Income a
Planning Area & Geographic Area	Employment	(\$million)
Arctic (Beaufort and Chukchi-NSB)		
Total-All Years	23,000	680
Direct	19,500	580
Indirect	1,400	40
Induced	2,100	60
Bering (North Aleutian Basin-AEB)		
Total-All Years	11,500	340
Direct	9,700	286
Indirect	700	22
Induced	1,100	32
South Alaska (Cook Inlet-KPB)		
Total-All Years	5,750	170
Direct	4,830	144
Indirect	350	10
Induced	520	16
Rest of Alaska		
Total-All Years	140,000	6,400
Direct	117,600	5,500
Indirect	8,400	380
Induced	14,000	520
Rest of United States		
Total-All Year	266,000	12,600
Direct	220,400	10,600
Indirect	20,000	800
Induced	26,000	1,200

^a Personal income estimates are in millions of 2007 dollars. Personal income is the sum of labor income and income of individual business owners.

NSB = North Slope Borough

KPB = Kenai Peninsula Borough

AEB = Aleutians East Borough

Table IV-13. Estimated Air Emissions from OCS Activities in the Atlantic, 2007-2012 Leasing

Program

		Pollu	ıtant (tons/y	y r)	
Activity	NO_x	SO_2	PM ₁₀	СО	VOC
Production Platforms	185-300	8-13	2-3	219-354	141-229
Exploration Wells	213-320	36-54	5-8	22-34	2-3
Platform Construction/Removal	144	24	4	17	2
Pipelaying Vessels	554-1,663	93-279	14-42	58-174	5-16
Support Vessels	31-379	5-64	1-9	4-51	1-8
Helicopters	2-7	0-1	0-1	6-29	2-11
Total	1,129-2,813	167-436	25-66	327-659	153-268

Table IV-14. Cumulative Case – Exploration and Development Scenario for the Gulf of Mexico

Scenario Elements	Gulf of Mexico
Years of Activity	40
Oil (Bbbl)	30
Gas (tcf)	140-160
Platforms	3,000
Exploration and Delineation Wells	7,000-9,000
Development and Production Wells	3,000
Miles of New Pipelines	6,000-12,000
Vessel Trips/Week	3,000-4,000
Helicopter Trips/Week	18,000-25,000
New Pipeline Landfalls	40
New Pipe yards	5
New Gas Processing Facilities	41
Platform Removals with Explosives	4,000
Drill Muds/Well (bbl)	
Exploration/Delineation	7,860
Development/Production	5,800
Drill Cuttings/Well (bbl)	
Exploration/Delineation	2,680
Development/Production	1,630
Produced Water/Well (bbl)	
Oil Well	450
Gas Well	68
Bottom Area Disturbed (ha)	
Platforms	3,000-5,000
Pipelines	9,000-12,000

<u>Table IV-15. Cumulative Case – Exploration and Development Scenario for Alaska</u>

	Arctic Subregion	Bering Sea Subregion	South Alaska Subregion
	Beaufort Sea	North Aleutian	Cook
Scenario Elements	Chukchi Sea	Basin	Inlet
Oil (Bbbl)	1.0-3.0	0.1-0.2	0.1-0.2
Gas (tcf)	None	5	0.1-0.2
Platforms	5-15	4 - 6	1 - 2
Exploration and Delineation Wells	Up to 60	Up to 20	Up to 10
Development and Production Wells	Up to 600	Up to 200	Up to 100
Miles of New Offshore Pipelines	Up to 300	Up to 150	Up to 125
Miles of New Onshore Pipelines	Up to 500	Up to 50	Up to 75
Vessel Trips/Week/Platform	1-3 ^a	1-3	1-3
Helicopter Trips/Day/Platform	1-3	1-3	1-3
New Pipeline Landfalls	1-3	1-2	1-2
New Shore Bases	2-4	1	0
New Waste Facilities	2-4	1	0-1
New Processing Facilities	2-4	1	0-1
Docks/Causeways	2-4	1	0
Exploration Well Muds, Cuttings,	425 tons dry mud	360 tons dry mud,	360 tons dry mud,
Produced Water	with 80% recycled;	with 80% recycled;	with 80% recycled;
	525 tons dry rock	450 tons dry rock	450 tons dry rock
	cuttings, totaling 610	cuttings; totaling 522	cuttings; totaling 522
	tons discharged at each well site	tons per site	tons per site
Development Wells Muds,	All muds, cuttings	All muds, cuttings	All muds, cuttings
Cuttings, Produced Water	and produced water	and produced water	and produced water
	treated and disposed of in wells	discharged down hole	discharged down hole
Maximum Water Depth for			
Exploration and Development (m)	100	100	100

^a In the Arctic, service vessel trips will only occur during open-water and broken-ice conditions.

Table IV-16. Cumulative Case – Exploration and Development Scenario for the Atlantic

Scenario Elements	Atlantic
Number of Sales ^a	1
Years of Activity	40
Oil (Bbbl)	0.05-0.08
Gas (tcf)	0.25-0.50
Platforms	1
Exploration and Delineation Wells	10-15
Development and Production Wells	8-12
Miles of New Pipelines	25-75
Vessel Trips/Week	1-5
Helicopter Trips/Week	5-10
New Pipeline Landfalls	1
New Pipe Yards	1
New Gas Processing Facilities	1
Platform Removals with Explosives	0
Drill Muds/Well (bbl)	
Exploration/Delineation	7,860
Development/Production	5,800
Drill Cuttings/Well (bbl)	
Exploration/Delineation	2,680
Development/Production	1,630
Produced Water/Well (bbl)	
Oil Well	450
Gas Well	68
Bottom Area Disturbed (ha)	
Platforms	2-5
Pipelines	50-125

^a In order for a lease sale to occur in the area offshore Virginia, the current Presidential withdrawal will have to be lifted, and the congressional moratorium will have to be discontinued. The sale offshore Virginia will be a special interest sale, meaning that even if the Presidential withdrawal and congressional moratorium end, the sale will not occur unless industry expresses interest in response to a call for information.

Table IV-17. Cumulative Case – Oil-Spill Assumptions

		Arctic	Bering Sea	South Alaska	
	Gulf of Mexico	Subregion	Subregion	Subregion	Atlantic
	Central and	Beaufort and	North Aleutian		
Scenario Elements	Western Gulf	Chukchi Seas	Basin	Cook Inlet	Virginia
Oil Production (Bbbl)	30	1 - 3	0.1 - 0.2	0.1 - 0.2	0.05 - 0.08
Large Spills $\geq 1,000$ bbl ^a					
Pipeline Spills	5		1 b	1 b	1 °
Platform Spills	30	3			
Tanker Spills	10				
Small Spills					
50 - 999 bbl	200	15	2	2	1 - 2
< 50 bbl	2,500	150	10	10	5 - 10
Import Tankers	42	0	0	0	2

^a Large spill sizes: pipeline – 4,600 bbl; platform – 1,500 bbl; tanker (Gulf of Mexico) – 5,300 bbl; tanker (west coast) – 7,800 bbl

^b Spill in Cook Inlet and North Aleutian Basin occurs from either a platform or a pipeline. North Aleutian Basin spill will be condensate and/or light crude.

^c Atlantic spill will be a 1,500-bbl spill from a tanker or barge.

Table IV-18. Cumulative Case—Alaska Employment and Income Forecasts ^a

Tuble 1 v 100 Cumulative Cube Thubha En	programent una meome	
Diaming Auga & Casanankia Auga	Elow	Personal Income D
Planning Area & Geographic Area	Employment	(\$million)
Arctic (Beaufort and Chukchi-NSB)		
Total-All Years	34,500	1,020
Average Year	1,500	48
Bering (North Aleutian Basin-AEB)		
Total-All Years	11,500	340
Average Year	500	16
South Alaska (Cook Inlet-KPB)		
Total-All Years	5,750	170
Average Year	250	8
Rest of Alaska		
Total-All Years	180,000	6,400
Average Year	16,200	247
Rest of United States		
Total-All Year	342,000	12,600
Average Year	15,300	585

^a All estimates are totals of direct, indirect, and induced impacts. For each planning area, the first set of estimates is of the total of all years over the life of the activity (employment or personal income); the second row is the average yearly forecast for the local area. For Rest of Alaska and Rest of United States, the forecasts are the total of all planning areas in the first row and the average per year in the second row

NSB = North Slope Borough; KPB = Kenai Peninsula Borough; AEB = Aleutians East Borough

^b Personal income estimates are in millions of 2007 dollars. Personal income is the sum of labor income and income of individual business owners.

Table IV-19. Cumulative Case—Estimated Air Emissions for OCS and Non-OCS Activities in the Gulf of Mexico

	Pollutant (tons/yr)					
Activity	NO_x	SO_2	PM_{10}	СО	VOC	
Production Platforms	112,367	4,999	1,136	132,659	85,714	
Exploration Wells	7,083-9,107	1,195-1,536	176-226	744-956	68-88	
Platform Construction/Removal	15,552-15,691	2,650-2,674	388-392	1,936-1,956	199-201	
Pipelaying Vessels	2,495-4,990	419-838	62-125	261-523	24-48	
Support Vessels	46,455-48,947	7,937-8,362	1,160-1,222	5,997-6,319	621-654	
Survey Vessels	111	18	3	11	1	
Helicopters	1,179-1,242	145-153	88-92	4,969-5,235	1,873-1,974	
Tanker/Barge Transport	3,165	544	81	528	2,572	
Total	188,407-195,620	17,906-19,124	3,094-3,277	147,104-148,187	91,072-91,251	
Year 2000 OCS Emissions ¹	165,587	18,249	3,042	108,540	62,850	
% Change with respect to Year 2000 emissions	+9 to +14	-8 to -2	-4 to +2	+34 to +36	+45	
Year 2000 non-oil/gas OCS Emissions ¹	49,923	9,280	1,371	13,536	24,444	

Source: Wilson et al, 2004

Table IV-20. Cumulative Case -Direct, Indirect, and Induced Employment and Income Projections, Gulf of Mexico Economic Impact Areas (EIA's)

	Total Empl	ployment	Average Yearly Employment	Yearly yment	Total Personal Income (\$millions)	nal Income ions)	Average Yearly Personal Income (\$millions)	Yearly Income ions)
Area	Low	High	Low	High	Low	High	Low	High
Alabama EIA	195,000	247,000	4,900	6,200	8,500	10,500	210	265
Mississippi EIA	167,500	211,500	4,200	5,300	5,000	6,500	125	165
Florida EIA	669,500	835,000	16,700	20,900	21,500	26,500	540	665
Louisiana EIA	4,944,500	6,313,500	123,600	157,800	194,500	247,000	4,860	6,175
Texas EIA	3,731,500	5,684,500	93,300	142,100	187,000	275,000	4,675	6,875
Total EIA's ^a	9,708,500	13,291,500	242,700	332,300	416,500	265,500	10,415	14,140
Other Gulf of Mexico	4,017,000	5,020,500	100,400	125,500	167,500	209,500	4,200	5,200
Rest of United States	7,449,500	9,527,500	186,200	238,200	348,500	44,500	8,700	1,100

^a Totals may not add due to rounding.

All estimates are totals of direct, indirect, and induced impacts.

Employment estimates are in employee years.
Personal income estimates are in millions of 2007 dollars

Table IV-21. Population Growth and Projections, Hampton Roads Area, 2000-2020

	2000	2010	2020
Newport News	180,697	198,200	210,000
Peninsula	498,557	537,780	611,440
Hampton Roads	1,569,541	1,704,000	1,888,000

Sources: U.S. Census Bureau (2000); Hampton Roads Planning District Commission (2005b); City of Newport News, Department of Planning & Development

Table IV-22. Total Non-Farm Civilian Jobs in Hampton Roads, 2005

Tuble 1 v 22. Total 1 toll 1 tilli Civilian 9	5 5 5 111 11 11 11 1 1 1 1 1 1 1 1 1 1	-	
A GE I	Number	D	
Area of Employment	(thousands)	Percentage	
Construction and Mining	53.7	7	
Manufacturing	60.4	8	
Trade, Transportation and Utilities	146.8	19	
Information	14.7	2	
Financial Activities	39.8	5	
Professional and Business Services	103.6	13	
Educational and Health Services	83.6	11	
Leisure and Hospitality	76.6	10	
Other Services	35.6	5	
Government (Federal, State, and Local)	154.2	20	
Total Non-farm Civilian Jobs	769.0	100	

Source: Hampton Roads Planning District Commission (2005b).

Table IV-23. Percent Population Growth by Age, Greater Hampton Roads Peninsula

Age Group	1990-2000	2000-2010	2000-2020	2000-2030
Under 15 Years	9.0%	-5.8%	-2.9%	0.2%
15-24 Years	5.6%	0.5%	-7.5%	-4.2%
25-34 Years	-19.1%	-0.9%	0.6%	-8.5%
35-44 Years	29.8%	-27-7%	-25.9%	-20.6%
45-54 Years	46.1%	37.0%	-7.5%	-3.4%
55-64 Years	24.5%	64.9%	122.4%	46.1%
65-74 Years	13.0%	29.3%	124.0%	218.0%
75 Years and Over	56.3%	46.8%	99.2%	238.1%
Total	12.8%	8.2%	15.6%	22.9%

Source: U.S. Census Bureau (2000), Virginia Employment Commission

Table IV-24. Racial Composition (%) of Hampton Roads, 2005

		. ,	1	,		
Locality	White	Black	Asian	Hispanic	Other	Mixed
Hampton Roads	62.4	32.0	3.0	3.4	0.5	2.1
Virginia	72.8	20.7	4.6	6.1	0.3	1.5
United States	78.4	14.3	4.8	16.4	1.0	1.5

Source: Hampton Roads Planning District Commission (2005b)

Table IV-25. Uses of Oil by Major Sector

			Residential and	Electricity	
End-Use Sector	Transportation	Industrial	Commercial	Generation	Total
2004 Consumption (Quadrillion Btu)	27.004	8.665	2.359	1.195	39.223
The Sector as a Percentage of Total 2004 Oil Consumption	68.85%	22.09%	6.01%	3.05%	100.00%
Oil as a Percentage of the Sector (2004)	9.16%	26.06%	6.10%	3.08%	39.33%

Source: USDOE (2004).

Table IV-26. Uses of Natural	ses of inatural Gas by Major Sector	ector			
			Docidontial		
End-Use Sector	Transportation	Industrial	Residential and Commercial	Electricity Generation	Total
1999 Consumption (Quadrillion Btu)	0.684	8.405	7.881	5.352	22.321
The Sector as a Percentage of Total 1999 Gas Consumption	3.06%	37.669%	35.31%	23.98%	100.00%
Gas as a Percentage of the Sector (1999)	2.46%	25.28%	20.37%	13.78%	22.38%

Source: USDOE (2004).

Table IV-27. Results of the No Action Alternative

	% of OCS P	roduction	Quantity	Involved
Sector	Low	High	Low	High
Oil				
OCS Production (BBO)	-100%	-100%	-5.5	-12.1
Onshore Production (BBO)	3%	3%	0.2	0.3
Imports (BBO)	88%	88%	5.1	10.7
Conservation (BBOE)	5%	5%	0.3	0.6
Switch to Gas (BBOE	4%	4%	0.2	0.5
Gas				
OCS Production (TcfG)	-100%	-100%	-20.7	-36.3
Onshore Production (TcfG)	28%	28%	5.8	10.3
Imports (TcfG)	16%	16%	3.3	5.9
Conservation (TcfGE)	16%	16%	3.4	5.8
Switch to Oil (TcfGE/BBOE)	40%	39%	8.2/1.5	14.3/2.6
Induced Oil Imports (BBO)	NA	NA	1.3	2.3

BBO = billion barrels of oil; BBOE = the Btu equivalent of billion barrels of oil; TcfG = trillion cubic feet of natural gas; TcfGE = the Btu equivalent of trillion cubic feet of natural gas.

Table IV-28. No Action Alternative—Large Oil-Spill Estimates

Variables	Gulf of Mexico	Alaska	Pacific
Additional Imports (BBO)	1.4 - 2.9	0.2 - 0.4	3.5 - 7.4
# of Spills \geq 1,000 bbl	0.2 - 1.0	0.04 - 0.1	0.7 - 1.9
Probability of 1 or More Spills $\geq 1,000$ bbl	21% - 62%	4% - 9%	50% - 84%
Imports Induced by Switching from Gas to Oil (BBO)	1.3 - 2.3		
# of Spills \geq 1,000 bbl	0.2 - 0.9		
Probability of 1 or More Spills $\geq 1,000$ bbl	19% - 57%		
Total Imports (BBO)	2.7 - 5.2	0.2 - 0.4	3.5 - 7.4
# of Spills \geq 1,000 bbl	0.5 - 1.8	0.04 - 0.1	0.7 - 1.9
Probability of 1 or More Spills $\geq 1,000$ bbl	36% - 84%	4% - 9%	50% - 84%