EAT VECTORS		LIKELIHOC	D	IMPACT				
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation ompleted by: Election Expert 1 ata extracted.	what perce think the th realized AN effect? Pro- maximum v of values as be realized effect in [m the time bu low as [min	ext of a Federa ntage of the til irreat would be D have an obs vide minimum values. Interpre "I think this til AND have an o cost likely] pere it this estimate imum] % and i %." (numbers in to 100)	me do you most likely ervable and et this range nreat would observeable cent (%) of could be as as high as	assuming the what perce it have a low	ext of a Feder: ne threat is re ntage of the t w, medium, a umbers shoul	alized, ime woul nd high		
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High		
KS								
DIDER ATTACKS						1		
Attacks Against VRDB	0	0	3	97	2	1		
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;								
Attacks to Voter's Assistance	0	0	3	97	2	1		
Types of threat vectors: Intentional corruption by malicious insiders of information provided to voters (omission, false or incomplete statement, outdated information);								
Attacks to Voting Access	0	0	3	97	2	1		
Types of threat vectors: Intentional failure at LEO to send or misaddress registration form and instructions; Intentional failure at LEO to send or misaddress registration rejections; Intentional addition of confusing language on registration form and instructions; Intentional failure to provide logir credentials and instructions to voters; Intentional corruption of login credentials and instructions provided to voters; Intentional addition of confusing information on voting interface;								
Attacks by Denial of Service	0	0	3	97	2	1		
Types of threat vectors: Intentional disruption of registration activities at LEO; Intentional disruption of transmission of registration materials; Intentional disruption of voter's ability to register;								
Attacks Against Registration Forms and Instructions	0	0	3	97	2	1		
Types of threat vectors: Intentional modification at LEO of registration forms and instructions; Intentional destruction at LEO of registration forms and instructions; Intentional addition at LEO of fake registration forms and instructions;		3						
Attacks During Transmission of Registration Forms and Instructions	0	0	5	97	2	1		
Types of threat vectors: Intentional modification of registration forms and instructions during their transmission from LEO to the voters; Intentional destruction of registration forms and instructions during their transmission from LEO to the voters; Intentional addition of fake registration forms and instructions during transmission from LEO to the voters;								
Attacks Against Marking of Registration Forms	0	0	3	97	2	1		
Types of threat vectors: Phishing attack; Election webserver tampering; Coerced registration; Masqueraded registration; Vote buying; Pay voter not to vote; Ineligible registration;								

REAT VECTORS	ı	LIKELIHOO	D		IMPACT		
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation Completed by: Election Expert 1 Data extracted.	what percer think the thi realized ANI effect? Prov maximum vi of values as be realized i effect in [mo the time but low as [mini	ext of a Federal stage of the tireat would be D have an obscide minimum alues. Interpre "I think this the AND have an o sost likely] percet this estimate mum] % and a %." (numbers a to 100)	me do you most likely ervable and et this range areat would observeable eent (%) of could be as as high as	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)			
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High	
Attacks During Transmission of Completed Registration Packets	0	0	3	97	2	1	
Types of threat vectors: Intentional modification of completed registration packets during their transmission from the voters to the LEO; Intentional destruction of completed registration packets during their transmission from the voters to the LEO; Intentional addition of fake completed registration packets during transmission from the voters to the LEO;							
Attacks Against Processing of Completed Registration Packets	0	1	3	97	2	1	
Types of threat vectors: Intentional modification of completed registration packets at the LEO; Intentional destruction of completed registration packets at the LEO;							
Attacks During Transmission of Registration Rejections	0	1	3	97	2	1	
Types of threat vectors: Intentional modification of registration rejections during their transmission from LEO to the voters; Intentional destruction of registration rejections during their transmission from LEO to the voters; Intentional addition of fake registration rejections during transmission from LEO to the voters;							
DUTSIDER ATTACKS							
Attacks Against Voter's Assistance	0	0	3	97	2	1	
Types of threat vectors: Intentional corruption by malicious outsiders of information provided to voters (omission, false or incomplete statement, outdated information);							

THREAT VECTORS		LIKELIHOC)D		IMPACT	
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation Completed by: Election Expert 1 Data extracted.	what percer think the th realized ANI effect? Prov maximum v of values as be realized effect in [mo the time but low as [mini	ext of a Federa ntage of the til reat would be D have an obsvide minimum alues. Interpre "I think this th AND have an cost likely] perc t this estimate imum] % and a %." (numbers n to 100)	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	assuming tl	time would and high	
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High
Attacks Against Voting Access Types of threat vectors: Phishing attack;	0	1	5	97	2	1
Attacks Against Marking of Registration Forms	0	5	10	97	2	1
Types of threat vectors: Phishing attack; Election webserver tampering; Coerced registration; Masqueraded registration; Vote buying; Pay voter not to vote; Ineligible registration;						
UNINTENTIONAL DISRUPTIONS						
ERRORS AT LOCAL ELECTION OFFICE						
Errors in VRDB	0	0	5	97	2	1
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;						
Errors in Voter's Assistance	0	0	5	97	2	1
Types of threat vectors: Erroneous information provided to voters (omission, false or incomplete statement, outdated information);						
Errors in Registration Forms and Instructions	0	0	5	97	2	1
Types of threat vectors: Accidental modification at LEO of registration forms and instructions; Accidental loss at LEO of registration forms and instructions; Accidental addition at LEO of erroneous registration forms and instructions; instructions;						
Errors in Processing Completed Registration Packets	0	0	5	97	2	1
Types of threat vectors: Accidental modification of completed registration packets at the LEO; Accidental loss of completed registration packets at the LEO; Accidental destruction of completed registration packets at the LEO;						
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS						
Errors in Transmission of Registration Forms and Instructions	0	0	5	97	2	1
Types of threat vectors: Accidental modification of registration forms and instructions during their transmission from LEO to the voters; Accidental loss of registration forms and instructions during their transmission from LEO to the voters; Accidental destruction of registration forms and instructions during their transmission from LEO to the voters;						

REAT VECTORS		LIKELIHOC	DD		IMPACT	
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation ompleted by: Election Expert 1 ata extracted.	what percei think the th realized AN effect? Prov maximum v of values as be realized effect in [m the time bu low as [min	ext of a Federa ntage of the ti reat would be D have an obs vide minimum alues. Interpre "I think this ti AND have and ost likely] pere t this estimate imum] % and a %." (numbers n to 100)	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	assuming the what perce it have a lo	ext of a Feder ne threat is re ntage of the (w, medium, a umbers shoul	ealized, time would and high
Voting Step: REGISTRATION	Minimum	Most Likely	Maximum	Low	Medium	High
Errors in Transmission of Completed Registration Packets	0	0	5	97	2	1
Types of threat vectors: Accidental modification of completed registration packets during their transmission from the voters to the LEO; Accidental loss of completed registration packets during their transmission from the voters to the LEO; Accidental destruction of completed registration packets during their transmission from the voters to the LEO;						
Errors in Transmission of Registration Rejections	0	0	3	97	2	1
Types of threat vectors: Accidental modification of registration rejections during their transmission from LEO to the voters; Accidental loss of registration rejections during their transmission from LEO to the voters; Accidental destruction of registration rejections during their transmission from LEO to the voters;					•	
RORS AT VOTER'S LOCATION						
Errors in Voting Access	0	2	5	97	2	1
Types of threat vectors: Online access nonexistent, irregular and/or unreliable; Difficulties with finding or logging in the election website; Election website ease-of-use and clarity;						
Errors in Obtaining Voter's Assistance	2	5	10	97	2	1
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;			•			
Errors in Registration Application	2	4	10	97	2	1
Types of threat vectors: Incorrect contact information provided to LEO; Registration packet incorrectly completed/signed; Registration packet incorrectly transmitted to LEO;						
CCIDENTAL DISRUPTIONS						
Disruptions by Natural Events	0	0	2	97	2	1
Types of threat vectors: Weather-related; Earthquake; Outbreak;						
Disruptions by Environmental Events	0	0	2	97	2	1
Types of threat vectors: Fire; Spill; Flooding;						
Disruptions by Human-Created Collateral Events	0	0	2	97	2	1
Types of threat vectors: Technical failure; Labor-related; Terrorism;						

THREAT VECTORS		LIKELIHOO	DD		IMPACT			
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation	what percenthink the threalized AN effect? Prov	text of a Federal election, centage of the time do you threat would be most likely IND have an observable ovide minimum and avalues. Interpret this range				alized,		
Completed by: Election Expert 1 Data extracted.	of values as be realized effect in [m the time bu low as [min	"I think this the AND have an cost likely] perot this estimate imum] % and a %." (numbers	hreat would observeable cent (%) of could be as as high as	what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High		
ATTACKS								
INSIDER ATTACKS								
Attacks Against VRDB	0	0	3	97	2	1		
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;		•						
Attacks to Voter's Assistance	0	0	3	97	2	1		
Types of threat vectors: Intentional corruption by malicious insiders of information provided to voters (omission, false or incomplete statement, outdated information);								
Attacks to Voting Access	0	0	3	97	2	1		
Types of threat vectors: Intentional failure at LEO to send or misaddress absentee ballot request form and instructions; Intentional failure at LEO to send or misaddress absentee ballot request rejections; Intentional failure at LEO to mail or misaddress absentee ballots; Intentional addition of confusing language on absentee ballot request form and instructions; Intentional addition of confusing language on instructions for marked ballot return; Intentional failure to provide login credentials and instructions to voters; Intentional corruption of login credentials and instructions provided to voters; Intentional addition of confusing information on voting interface;								
Attacks by Denial of Service	0	0	3	97	2	1		
Types of threat vectors: Election webserver tampering; Intentional disruption of absentee ballot request activities at LEO; Intentional disruption of transmission of absentee ballot request materials; Intentional disruption of voter's ability to request an absentee ballot;								
Attacks Against Absentee Ballot Request Forms and Instructions	0	0	3	97	2	1		
Types of threat vectors: Intentional modification at LEO of absentee ballot request forms and instructions; Intentional destruction at LEO of absentee ballot request forms and instructions; Intentional addition at LEO of fake absentee ballot request forms and instructions;								

REAT VECTORS		LIKELIHOC	D	IMPACT					
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation ompleted by: Election Expert 1 ata extracted.	what percer think the thined and in realized ANI effect? Proving and in maximum violation of values as be realized and effect in [months] the time but low as [minimax]	ext of a Federa ntage of the ti reat would be D have an obs ide minimum alues. Interpre "I think this ti AND have an o ost likely] pero t this estimate mum] % and a %." (numbers	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	assuming the what perce it have a love	In the context of a Federal electic assuming the threat is realized, what percentage of the time wor it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High			
Attacks During Transmission of Absentee Ballot Request Forms and Instructions	0	0	1	97	2	1			
Types of threat vectors: Intentional modification of absentee ballot request forms and instructions during their transmission from LEO to the voters; Intentional destruction of absentee ballot request forms and instructions during their transmission from LEO to the voters; Intentional addition of fake absentee ballot request forms and instructions during transmission from LEO to the voters;									
Attacks Against Marking of Absentee Ballot Requests	0	0	1	97	2	1			
Types of threat vectors: Election webserver tampering;									
Attacks During Transmission of Completed Absentee Ballot Request Packets	0	0	1	97	2	1			
Types of threat vectors: Intentional modification of completed absentee ballot request packets during their transmission from the voters to the LEO; Intentional destruction of completed absentee ballot request packets during their transmission from the voters to the LEO; Intentional addition of fake completed absentee ballot request packets during transmission from the voters to the LEO;									
Attacks Against Processing of Completed Absentee Ballot Request Packets	0	0	3	97	2	1			
Types of threat vectors: Intentional modification of completed absentee ballot request packets at the LEO; Intentional destruction of completed absentee ballot request packets at the LEO; Intentional addition of fake completed absentee ballot request packets at the LEO;									
Attacks During Transmission of Rejections of Absentee Ballot Requests	0	0	1	97	2	1			
Types of threat vectors: Intentional modification of rejections of absentee ballot requests during their transmission from LEO to the voters; Intentional destruction of rejections of absentee ballot requests during their transmission from LEO to the voters; Intentional addition of fake rejections of absentee ballot requests during transmission from LEO to the voters;									
Attacks Against Absentee Ballots and Instructions	0	0	3	97	2	1			
Types of threat vectors: Intentional modification at LEO of absentee ballots and instructions; Intentional destruction at LEO of absentee ballots and instructions; Intentional addition at LEO of fake absentee ballots and instructions;									

THREAT VECTORS		LIKELIHOC	DD	IMPACT			
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation the Internet automated tabulation ompleted by: Election Expert 1 In the context of a Federal election, what percentage of the time do you think the threat would be most likely realized AND have an observable effect? Provide minimum and maximum values. Interpret this range of values as "I think this threat would be realized AND have an observable effect in [most likely] percent (%) of effect in [most likely] percent				ne threat is re ntage of the t w, medium, a	ealized, time would nd high		
Data extracted.	the time bu	t this estimate imum] % and a %." (numbers	e could be as as high as	100)			
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High	
OUTSIDER ATTACKS							
Attacks Against Voter's Assistance	0	0	3	97	2	1	
Types of threat vectors: Intentional corruption by malicious outsiders of information provided to voters (omission, false or incomplete statement, outdated information);			•				
Attacks Against Voting Access	0	1	3	97	2	1	
Types of threat vectors: Phishing attack;							
Attacks by Denial of Service	0	1	3	97	2	1	
Types of threat vectors: Election webserver tampering; Intentional disruption of absentee ballot request activities at LEO; Intentional disruption of transmission of absentee ballot request materials; Intentional disruption of voter's ability to request an absentee ballot;							
Attacks Against Marking of Absentee Ballot Requests	0	1	3	97	2	1	
Types of threat vectors: Phishing attack; Coerced absentee ballot request; Masqueraded absentee ballot request; Vote buying; Pay voter not to vote; Ineligible absentee ballot request;							
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	3	97	2	1	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;							
Errors in Voter's Assistance	0	1	3	97	2	1	
Types of threat vectors: Erroneous information provided to voters (omission, false or incomplete statement, outdated information);							

THREAT VECTORS		L	LIKELIHOO	D	IMPACT			
<u>ba</u>		what percenthink the think the time but the time time the time the time time the time time the time time time the time time time time time time time tim	xt of a Federa tage of the tile teat would be D have an obside minimum alues. Interpre "I think this the AND have an operatible of this tile this estimate muml % and a	me do you most likely ervable and et this range hreat would observeable cent (%) of	assuming the what perce it have a lov	ext of a Feder ne threat is re ntage of the t v, medium, a umbers shoul	ealized, time would and high	
		-	%." (numbers	· ·				
Voting Step: AE	BSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High	
Errors in Absentee Ballot Request Forms and Instructions		0	0	3	97	2	1	
	ee ballot request forms and instructions; Accidental loss at LEO of absentee ballot absentee ballot request forms and instructions; Accidental addition at LEO of							
Errors in Processing Completed Absentee Ballot Request Page	ickets	0	0	1	97	2	1	
Types of threat vectors: Accidental modification of completed abserballot request packets at the LEO; Accidental destruction of complete abserballot request packets at the LEO; Accidental destruction of complete abserballot requests and the complete accidental modification of complete abserballot requests and the complete accidental modification of complete abserballot requests and the complete accidental modification of complete abserballot requests and the complete accidental modification of complete abserballot requests and the complete accidental modification of complete accidental modification accidental m	sentee ballot request packets at the LEO; Accidental loss of completed absentee oleted absentee ballot request packets at the LEO;							
Errors in Absentee Ballots and Instructions		0	0	1	97	2	1	
	ee ballots and instructions; Accidental loss at LEO of absentee ballots and d instructions; Accidental addition at LEO of erroneous absentee ballots and							
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS								
Errors in Transmission of Absentee Ballot Request Forms and	nd Instructions	0	0	1	97	2	1	
	of trequest forms and instructions during their transmission from LEO to the voters; during their transmission from LEO to the voters; Accidental destruction of absentee m LEO to the voters;							
Errors in Transmission of Completed Absentee Ballot Reques	est Packets	0	0	1	97	2	1	
	sentee ballot request packets during their transmission from the voters to the LEO; ing their transmission from the voters to the LEO; Accidental destruction of sion from the voters to the LEO;							

THREAT VECTORS		LIKELIHOC	DD		IMPACT	
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation Completed by: Election Expert 1 Data extracted.	what percer think the thine realized ANI effect? Proving maximum vious as be realized a effect in [mother time but low as [mini	ext of a Federa ntage of the ti reat would be D have an obs ide minimum alues. Interpre "I think this ti AND have an o ost likely] pero t this estimate mum] % and a %." (numbers into 100)	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	assuming the what perce it have a lov	ext of a Feder ne threat is re ntage of the w, medium, a umbers shou	ealized, time would and high
Voting Step: ABSENTEE BALLOT REQUEST	Minimum	Most Likely	Maximum	Low	Medium	High
Errors in Transmission of Rejections of Absentee Ballot Requests	0	0	1	97	2	1
Types of threat vectors: Accidental modification of rejections of absentee ballot requests during their transmission from LEO to the voters; Accidental loss of rejections of absentee ballot requests during their transmission from LEO to the voters; Accidental destruction of rejections of absentee ballot requests during their transmission from LEO to the voters;						
ERRORS AT VOTER'S LOCATION						
Errors in Voting Access	0	1	5	97	2	1
Types of threat vectors: Online access nonexistent, irregular and/or unreliable; Difficulties with finding or logging in the election website; Election website ease-of-use and clarity;						
Errors in Obtaining Voter's Assistance	0	2	5	97	2	1
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;					•	
Errors in Absentee Ballot Requests	0	1	5	97	2	1
Types of threat vectors: Incorrect contact information provided to LEO; Absentee ballot request packet incorrectly completed/signed; Absentee ballot request packet incorrectly transmitted to LEO;						
ACCIDENTAL DISRUPTIONS						
Disruptions by Natural Events	0	0	2	97	2	1
Types of threat vectors: Weather-related; Earthquake; Outbreak;						
Disruptions by Environmental Events	0	0	2	97	2	1
Types of threat vectors: Fire; Spill; Flooding;						
Disruptions by Human-Created Collateral Events	0	0	2	97	2	1
Types of threat vectors: Technical failure; Labor-related; Terrorism;						

THREAT VECTORS		LIKELIHOC	D		IMPACT	
VOTING SCENARIO: Electronic absentee voting system with <u>balloting via Web interface</u> , <u>transmission via</u> <u>the Internet</u> , and <u>automated tabulation</u>	what percer think the the realized ANI effect? Prov	xt of a Federa ntage of the ti reat would be D have an obs ide minimum alues. Interpro	ime do you e most likely servable in and assuming the threat is realized, what percentage of the time would			
Completed by: Election Expert 1 Data extracted.	be realized A effect in [mo the time but low as [mini	"I think this the AND have an object likely] pero this estimate from many and a %." (numbers to 100)	observeable cent (%) of could be as as high as	it have a low, medium, and high impact? (numbers should sum to 100)		
Voting Step: ABSENTEE BALLOT DELIVERY	Minimum	Most Likely	Maximum	Low	Medium	High
ATTACKS						
INSIDER ATTACKS						
Attacks by Denial of Service	0	0	1	97	2	1
Types of threat vectors: Election webserver tampering; Intentional disruption of absentee ballot transmission from the LEO to the voters;						
Attacks During Transmission of Absentee Ballot and Instructions	0	0	1	97	2	1
Types of threat vectors: Intentional modification of absentee ballots and instructions during their transmission from LEO to the voters; Intentional destruction of absentee ballots and instructions during their transmission from LEO to the voters; Intentional addition of fake absentee ballots and instructions during transmission from LEO to the voters;						
OUTSIDER ATTACKS						
Attacks Against Voting Access	0	1	5	97	2	1
Types of threat vectors: Phishing attack;						
Attacks by Denial of Service	0	1	5	97	2	1
Types of threat vectors: Intentional disruption of transmission of absentee ballots from the LEO to the voters;						
UNINTENTIONAL DISRUPTIONS						
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS						
Errors in Transmission of Absentee Ballot and Instructions	0	0	1	97	2	1
Types of threat vectors: Accidental modification of absentee ballots and instructions during their transmission from LEO to the voters; Accidental loss of absentee ballots instructions during their transmission from LEO to the voters; Accidental destruction of absentee ballots and instructions during their transmission from LEO to the voters;						

THREAT VECTORS		LIKELIHOC	DD	IMPACT					
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation	what percer think the th realized ANI effect? Prov	ext of a Federa ntage of the ti reat would be D have an obs ride minimum	me do you most likely ervable and	In the context of a Federal election, assuming the threat is realized,					
Completed by: Election Expert 1	be realized AND have an observeable				what percentage of the time would it have a low, medium, and high impact? (numbers should sum to				
Data extracted.	effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)			100)					
Voting Step: ABSENTEE BALLOT DELIVERY	Minimum	Most Likely	Maximum	Low	Medium	High			
ACCIDENTAL DISRUPTIONS									
Disruptions by Natural Events	0	0	2	97	2	1			
Types of threat vectors: Weather-related; Earthquake; Outbreak;									
Disruptions by Environmental Events	0	0	2	97	2	1			
Types of threat vectors: Fire; Spill; Flooding;									
Disruptions by Human-Created Collateral Events	0	0	2	97	2	1			
Types of threat vectors: Technical failure; Labor-related; Terrorism;									

THREAT VECTORS		LIKELIHOC	DD		IMPACT	
VOTING SCENARIO: Electronic absentee voting system with <u>balloting via Web interface</u> , <u>transmission via</u> <u>the Internet</u> , and <u>automated tabulation</u>	balloting via Web interface, transmission via the Internet, and automated tabulation the Internet this range				ext of a Feder ne threat is re ntage of the t	alized,
Completed by: Election Expert 1 Data extracted.	be realized A effect in [mo the time but low as [mini	"I think this the AND have an object likely] peropert this estimate from many and a second control of the thick this estimate from many and a second control of the thick this estimate is a second control of the thick this estimate is a second control of the thick this estimate is a second control of the thick this estimate is a second control of the thick this estimate is a second control of the thick this estimate is a second control of this estimate	observeable cent (%) of could be as as high as	it have a low, medium, and high impact? (numbers should sum to 100)		
Voting Step: BALLOT MARKING	Minimum	Most Likely	Maximum	Low	Medium	High
ATTACKS						
INSIDER ATTACKS						
Attacks Against Marking Absentee Ballots and Forms	0					
Types of threat vectors: Election webserver tampering;						
OUTSIDER ATTACKS						
Attacks Against Marking Absentee Ballots and Forms	0					
Types of threat vectors: Phishing attack; Coerced vote; Masqueraded vote; Vote buying; Pay voter not to vote; Ineligible vote;						
UNINTENTIONAL DISRUPTIONS						
ERRORS AT VOTER'S LOCATION						
Errors in Voting Access	0	1	5	97	2	1
Types of threat vectors: Online access nonexistent, irregular and/or unreliable; Difficulties with finding or logging in the election website; Election website ease-of-use and clarity;						
Errors in Obtaining Voter's Assistance	0	1	5	97	2	1
Types of threat vectors: Contact wrong LEO; Being unaware of voter's assistance resources; Putting trust in unvetted third-party resources;						
Errors in Absentee Ballot Marking	0	1	5	97	2	1
Types of threat vectors: Marked ballot packet incorrectly completed/signed; Absentee ballot damaged on webserver; Marked ballot packet incorrectly transmitted to LEO; Marked ballot packet not transmitted to LEO;						

THREAT VECTORS			LIKELIHOC	D	IMPACT				
Completed by: Ele	Internet, and <u>automated tabulation</u>	what percer think the th realized ANI effect? Prov maximum v of values as be realized a effect in [max	ext of a Federa ntage of the ti reat would be D have an obs ide minimum alues. Interpre "I think this the AND have an o ost likely] pero	me do you most likely ervable and et this range hreat would observeable tent (%) of	e do you nost likely vable In the context of a Federal electic assuming the threat is realized, what percentage of the time wo it have a low, medium, and high impact? (numbers should sum to				
Data extracted.		the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)			100,				
Voting Step: BAL	LLOT MARKING	Minimum Most Likely Maximum		Maximum	Low	Medium	High		
ACCIDENTAL DISRUPTIONS									
Disruptions by Natural Events		0	1	5	97	2	1		
Types of threat vectors: Weather-related; Earthquake; Outbreak;									
Disruptions by Environmental Events		0	0	1	97	2	1		
Types of threat vectors: Fire; Spill; Flooding;									
Disruptions by Human-Created Collateral Events		0	0	2	97	2	1		
Types of threat vectors: Technical failure; Labor-related; Terrorism;									

THREAT VECTORS		.IKELIHO(OD O		IMPACT		
VOTING SCENARIO: Electronic absentee voting system with <u>balloting via Web interface</u> , <u>transmission via</u> <u>the Internet</u> , and <u>automated tabulation</u>	what percer think the th realized AN effect? Prov maximum v	D have an ob ride minimur alues. Interp	time do you de most likely deservable on and ret this range	In the context of a Federal election, assuming the threat is realized, what percentage of the time would			
Completed by: Election Expert 1 Data extracted.	of values as "I think this threat would be realized AND have an observeable effect in [most likely] percent (%) of the time but this estimate could be as low as [minimum] % and as high as [maximum] %." (numbers DO NOT need to sum to 100)					, 0	
Voting Step: MARKED BALLOT RETURN	Minimum Most Likely Maximum			Low	Medium	High	
ATTACKS							
INSIDER ATTACKS							
Attacks by Denial of Service	0	0	1	97	2	1	
Types of threat vectors: Intentional disruption of transmission of marked ballots from voter to LEO;							
Attacks During Transmission of Marked Ballots Packets	0	0	1	97	2	1	
Types of threat vectors: Intentional modification of marked ballot packets during their transmission from the voters to the LEO; Intentional destruction of marked ballot packets during their transmission from the voters to the LEO; Intentional addition of fake marked ballot packets during transmission from the voters to the LEO;							
OUTSIDER ATTACKS							
Attacks to Voting Access	0	1	2	97	2	1	
Types of threat vectors: Phishing attack;							
Attacks by Denial of Service	0	1	2	97	2	1	
Types of threat vectors: Intentional disruption of transmission of marked ballots;							
UNINTENTIONAL DISRUPTIONS							
ERRORS DURING TRANSMISSION OF ELECTION MATERIALS							
Errors in Transmission of Marked Ballot Packets	0	0	1	97	2	1	
Types of threat vectors: Accidental modification of marked ballot packets during their transmission from the voters to the LEO; Accidental loss of marked ballot packets during their transmission from the voters to the LEO; Accidental destruction of marked ballot packets during their transmission from the voters to the LEO;							

THREAT VECTORS		L	IKELIHOO	DD	IMPACT					
<u>ba</u>	ectronic absentee voting system with alloting via Web interface, transmission via the Internet, and automated tabulation ection Expert 1	what percer think the thine the realized ANI effect? Proving and the realized of the realized of the time but low as [minimum with as [minimum with the time but low as [minimum with the time but low as [minimum with the time w	D have an ob ide minimun alues. Interp "I think this AND have an ost likely] pei t this estimat imum] % and %." (number	time do you e most likely servable n and ret this range threat would observeable reent (%) of the could be as as high as	In the context of a Federal electic assuming the threat is realized, what percentage of the time wou it have a low, medium, and high impact? (numbers should sum to					
Voting Step: M	ARKED BALLOT RETURN	Minimum	Most Likely	Maximum	Low	Medium	High			
ACCIDENTAL DISRUPTIONS										
Disruptions by Natural Events		0	0	2	97	2	1			
Types of threat vectors: Weather-related; Earthquake; Outbreak;										
Disruptions by Environmental Events		0	0	2	97	2	1			
Types of threat vectors: Fire; Spill; Flooding;										
Disruptions by Human-Created Collateral Events		0	0	2	97	2	1			
Types of threat vectors: Technical failure; Labor-related; Terrorism	n;									

HREAT VECTORS		LIKELIHOC	DD	IMPACT				
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation Completed by: Election Expert 1 Data extracted.	what perce think the the realized AN effect? Pro- maximum of of values as be realized effect in [m the time bu- low as [mir	ext of a Federa ntage of the ti nreat would be D have an obs vide minimum values. Interpro "I think this t AND have an o cost likely] per it this estimate imum] % and] %." (numbers n to 100)	me do you most likely ervable and et this range hreat would observeable cent (%) of e could be as as high as	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: RETURNED BALLOT PROCESSING & TABULATION	Minimum	Most Likely	Maximum	Low	Medium	High		
TTACKS								
INSIDER ATTACKS Attacks Against VRDB	0	0	1	97	2	1		
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;	0	U	'	97	2	1		
Attacks by Denial of Service	0	0	1	97	2	1		
Types of threat vectors: Intentional disruption of processing of marked ballots at LEO;								
Attacks Against Processing of Returned Ballots	0	0	1	97	2	1		
Types of threat vectors: Intentional modification of marked ballot packets at the LEO; Intentional destruction of marked ballot packets at the LEO; Intentional addition of fake marked ballot packets at the LEO; Intentional loss of marked ballot packets at the LEO;								
Attacks Against Tabulation	0	0	1	97	2	1		
Types of threat vectors: Intentional subversion of the counting process; Intentional subversion of the validation process; Intentional subversion of the tabulated results;								
Attacks Against Adjudication	0	0	1	97	2	1		
Types of threat vectors: Intentional refusal of legitimate ballots; Intentional acceptance of invalid ballots; Intentional misapplication of rules for determining voter's intent;								
OUTSIDER ATTACKS								
Attacks by Denial of Service	0	0	1	97	2	1		
Types of threat vectors: Intentional disruption of marked ballot processing and tabulation activities at LEO;								

THREAT VECTORS		LIKELIHOC	D		IMPACT		
VOTING SCENARIO: Electronic absentee voting system with <u>balloting</u> <u>via Web interface</u> , <u>transmission via the Internet</u> , and <u>automated tabulation</u>	what percei think the th realized AN effect? Prov	ext of a Federa ntage of the ti reat would be D have an obs vide minimum values. Interpro	me do you most likely ervable and	In the context of a Federal election, assuming the threat is realized, what percentage of the time would it have a low, medium, and high impact? (numbers should sum to			
Completed by: Election Expert 1 Data extracted.	be realized a effect in [m the time bu low as [min	s"I think this ti AND have an o ost likely] pero it this estimate imum] % and i %." (numbers n to 100)	observeable cent (%) of could be as as high as				
Voting Step: RETURNED BALLOT PROCESSING & TABULATION	Minimum	Most Likely	Maximum	Low	Medium	High	
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	1	97	2	1	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;							
Errors in Processing of Returned Ballots	0	0	1	97	2	1	
Types of threat vectors: Accidental modification of marked ballot packets at the LEO; Accidental destruction of marked ballot packets at the LEO; Accidental loss of marked ballot packets at the LEO;							
Errors in Tabulation	0	0	1	97	2	1	
Types of threat vectors: Errors in counting process; Errors in validation process; Accidental loss of tabulated results; Accidental destruction of tabulated results; Errors in publication of tabulated results;							
Errors in Adjudication	0	0	1	97	2	1	
Types of threat vectors: Accidental refusal of legitimate ballots; Accidental acceptance of invalid ballots; Accidental misapplication of rules for determining voter's intent;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	0	0	2	97	2	1	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							
Disruptions by Environmental Events	0	0	2	97	2	1	
Types of threat vectors: Fire; Spill; Flooding;							
Disruptions by Human-Created Collateral Events	0	0	2	97	2	1	
Types of threat vectors: Technical failure; Labor-related; Terrorism;							

THREAT VECTORS		LIKELIHOC	DD	IMPACT			
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation	what percenthink the thi realized ANI effect? Prov	xt of a Federa stage of the ti reat would be D have an obs ide minimum	me do you most likely ervable and	In the context of a Federal election,			
Completed by: Election Expert 1 Data extracted.	of values as "I think this threat would it have an ensured AND have an ensured by				what percentage of the time would it have a low, medium, and high impact? (numbers should sum to 100)		
Voting Step: POST-ELECTION AUDIT	Minimum Most Likely Maximum			Low	Medium	High	
ATTACKS							
INSIDER ATTACKS			_				
Attacks Against VRDB	0	0	3	97	2	1	
Types of threat vectors: Intentional modification of registration records; Intentional destruction of registration records; Intentional addition of fake registration records; VRDB intentional crash;							
Attacks Against Post-Election Audit	0	0	3	97	2	1	
Types of threat vectors: Intentionally compromise auditors; Intentionally select audit samples non-randomly; Intentional modification of audit results; Intentional destruction of audit results;							
UNINTENTIONAL DISRUPTIONS							
ERRORS AT LOCAL ELECTION OFFICE							
Errors in VRDB	0	0	3	97	2	1	
Types of threat vectors: Accidental modification of registration records; Accidental loss of registration records; Accidental destruction of registration records; Accidental addition of erroneous registration records; VRDB accidental crash;							
Errors in Post-Election Audit	0	0	3	97	2	1	
Types of threat vectors: Accidental non-random selection of audit samples; Accidental modification of audit results; Accidental loss of audit results; Accidental destruction of audit results;							
ACCIDENTAL DISRUPTIONS							
Disruptions by Natural Events	0	0	2	97	2	1	
Types of threat vectors: Weather-related; Earthquake; Outbreak;							

THREAT VECTORS	ı	LIKELIHOO	D	IMPACT				
VOTING SCENARIO: Electronic absentee voting system with balloting via Web interface, transmission via the Internet, and automated tabulation Completed by: Election Expert 1 Data extracted.	what percer think the th realized ANI effect? Prov maximum v. of values as be realized effect in [mo the time but low as [mini	ext of a Federa ntage of the til reat would be D have an obsi ide minimum alues. Interpre "I think this the AND have an obst likely] perc est likely] perc t this estimate mum] % and a %." (numbers	me do you most likely ervable and et this range breat would observeable eent (%) of could be as as high as	In the context of a Federal electic assuming the threat is realized, what percentage of the time wou it have a low, medium, and high impact? (numbers should sum to 100)				
Voting Step: POST-ELECTION AUDIT		Most Likely	Maximum	Low	Medium	High		
Disruptions by Environmental Events	0	0	2	97	2	1		
Types of threat vectors: Fire; Spill; Flooding;								
Disruptions by Human-Created Collateral Events	0	0	2	97	2	1		
Types of threat vectors: Technical failure; Labor-related; Terrorism;								