

FILED

10. 25 2014

COURT OF APPEALS
DIVISION III
STATE OF WASHINGTON
BY _____

COURT OF APPEALS
DIVISION III
OF THE STATE OF WASHINGTON

NO. 320006

RAYMOND COOK and ARLENE COOK
Appellants,
v.

STEVENS COUNTY, a local governmental entity,

Respondents

&

TARBERT LOGGING, INC., a Washington Corporation, and SHANE
BEAN and JANE DOE BEAN, husband and wife and the marital
community comprised thereof;

Respondents

Brief of Respondent Stevens County

EVANS, CRAVEN & LACKIE, P.S.
Michael E. McFarland Jr., WSBA #23000
818 W. Riverside, Suite 250
Spokane, WA 99201-0910
(509) 455-5200
ATTORNEYS FOR STEVENS COUNTY

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	COUNTERSTATEMENT OF THE CASE.....	2
	A. The Pre-Trial Spoliation Motion.....	3
	B. Pretrial Motions Regarding Dr. Richard Gill.....	6
	C. Trial Testimony Regarding The Width Of The Road And Whether It Was A Proximate Cause Of The Accident.	8
	1. Mr. Cook's Lay Witnesses	8
	a. Mr. Joshua Cook	8
	b. Delbert Hallam.....	9
	c. Stevens County Deputy Sheriff Julie Melby	10
	d. Stevens County Deputy Sheriff Loren Erdman	10
	e. Shane Bean.....	11
	f. Shannon Wolfrum.....	12
	g. Arlene Cook	12
	2. Mr. Cook's Own Testimony.....	13
	3. Mr. Cook's Expert Witness	14
	4. Stevens County's Expert Witnesses	14
	a. John Hunter.....	15
	b. Wilfred Nixon.....	15
III.	ARGUMENT.....	16
	A. The Trial Court Did Not Abuse Its Discretion In Finding Spoliation.	17
	B. The Trial Court's Sanction Was Proper.	27
	C. The Excluded Evidence Proved Irrelevant To Mr. Cook's Claim Against Stevens County.	30
	D. The County Is Entitled to Fees on Appeal Under RAP 18.1.....	34
IV.	CONCLUSION.....	34

Appendix A.....

Appendix B.....

TABLE OF AUTHORITIES

Cases	Page(s)
<i>Arnold v. Sanstol</i> , 43 Wash.2d 94, 260 P.2d 327 (1953).....	31
<i>Brown v. Spokane County Fire Prot. Dist. No. 1</i> , 100 Wn.2d 188, 668 P.2d 571 (1983).....	31
<i>Brundridge v. Fluor Fed. Servs., Inc.</i> , 164 Wash.2d 432, 191 P.3d 879 (2008).....	26
<i>Cobb v. Snohomish Cnty.</i> , 86 Wash. App. 223, 935 P.2d 1384 (1997).....	31
<i>In re Guardianship of Cornelius</i> , 326 P.3d 718 (2014).....	26
<i>Henderson v. Tyrrell</i> , 80 Wash.App. 592, 910 P.2d 522 (1996).....	<i>passim</i>
<i>Homeworks Constr., Inc. v. Wells</i> , 133 Wash.App. 892, 138 P.3d 654 (2006).....	<i>passim</i>
<i>Hoskins v. Reich</i> , 142 Wn. App. 557, 174 P.3d 1250 (2008).....	31
<i>Marshall v. Bally's Pacwest, Inc.</i> , 94 Wash.App. 372 972 P.2d 475 (1999).....	28, 30
<i>Mayer v. Sto Indus., Inc.</i> , 156 Wash.2d 677, 132 P.3d 115 (2006).....	17
<i>In re Pers. Restraint of Thompson</i> , 141 Wash.2d 712, 10 P.3d 380 (2000).....	29
<i>Pier 67, Inc. v. King County</i> , 89 Wash.2d 379, 573 P.2d 2 (1977).....	20, 29

<i>Tavai v. Walmart Stores, Inc.</i> , 176 Wash. App. 122, 307 P.3d 811 (2013).....	18
<i>Thomas v. French</i> , 99 Wash.2d 95, 659 P.2d 1097 (1983).....	31
<i>Zubulake v. UBS Warburg</i> , 220 F.R.D. 212 (S.D.New York, 2003)	21
Statutes	
RCW 4.84.010	34
RCW 36.75.300	3, 4
Other Authorities	
Appendix A.....	4, 18
Appendix B	9
RAP 18.1.....	34
5 Karl B. Tegland, Washington Practice: Evidence § 402.6, at 286 (5th ed.2007).....	27
2 John W. Strong, McCormick on Evidence § 265, at 192 (4th ed.1992)	28

I. INTRODUCTION

On February 6, 2009, Appellant Ray Cook and Respondent Shane Bean (Tarbert Logging) collided as their two vehicles rounded a blind corner (from opposite directions) on Dead Medicine Road, a "primitive road" in Stevens County. Mr. Cook and his wife (collectively "Mr. Cook") brought suit against Respondents Stevens County ("the County"), Shane Bean and Tarbert Logging. Mr. Cook alleged that the County was negligent in its snowplowing of Dead Medicine Road:

The Cooks further claim that Stevens County was negligent in its snowplowing of Dead Medicine Road and that the same was a cause of the collision between Mr. Cook's vehicle and Mr. Bean's vehicle. Specifically, the Cooks allege that Stevens County had failed to plow Dead Medicine Road wide enough for two vehicles to safely pass.

*Jury Instruction No. 2, RP 1279.*¹

The case proceeded to trial on August 19, 2013, during which the jury was presented with overwhelming evidence establishing that Dead Medicine Road was plowed in a reasonable and non-negligent manner. The evidence included testimony from both lay and expert witnesses, including an expert witness called by Mr. Cook. The jury ultimately

¹ *See also*, Jury Instruction No. 12 ("Stevens County was negligent by failing to properly plow the roadway to a safe width"), *RP 1282*. Mr. Cook did not object to any of the jury instructions. *RP 1271*.

concluded that the County did not negligently snowplow Dead Medicine Road. CP 356. Mr. Cook now appeals the jury verdict based solely upon the argument that the trial court abused its discretion in finding spoliation of evidence by Mr. Cook.

This Court should affirm the jury's verdict in favor of the County for two primary reasons. First, Mr. Cook cannot establish that the trial court abused its discretion in finding spoliation of evidence, and/or that the trial court abused its discretion in crafting a remedy to address the spoliation. Second, even if the trial court's spoliation rulings were in error, Mr. Cook has wholly failed to establish that the purported errors in any manner affected the outcome of the trial. The trial court's ruling on spoliation concerned evidence regarding the speed of the two vehicles involved in the accident. The respective speed of the vehicles had no relevance to the question of whether the County plowed the road to a sufficient/reasonable width. Any error committed by the trial court was therefore harmless and not grounds to overturn the jury's verdict.

II. COUNTERSTATEMENT OF THE CASE

Dead Medicine Road is a "primitive road" in a very rural part of Stevens County. RP 1288. As noted above, Mr. Cook brought suit against the County alleging that the County negligently plowed Dead Medicine Road and that the same was a proximate cause of the February 6, 2009

accident between Mr. Cook and Mr. Bean. Early in the case, the County moved for summary judgment, arguing that RCW 36.75.300 precluded imposition of any liability on the County for allegedly negligently maintaining Dead Medicine Road. RCW 36.75.300 provides in part:

No design or signing or maintenance standards or requirements, other than the requirement that warning signs be placed as provided in this section, apply to primitive roads.

The trial court denied the County's summary judgment motion, as well as the County's motion for reconsideration. The County petitioned this Court for discretionary review. *See, No. 30684-4-III*. On April 20, 2012, the Court denied the County's motion for discretionary review. *Id.*

The case moved forward and eventually proceeded to trial on August 19, 2013. On August 28, 2013, the jury returned a verdict in favor of the County and Tarbert Logging. CP 356.

A. The Pre-Trial Spoliation Motion

On March 25, 2009 (approximately six weeks after the accident), Mr. Cook had his expert witness, Richard Gill, inspect Mr. Cook's truck. CP 115, CP 121. Based upon that inspection, Dr. Gill issued a report in which he concluded that there was "insufficient information to conclude that Mr. Cook's actions and/or inactions were a significant contributing

factor to this collision." *See, Appendix A.*² Dr. Gill also concluded that there is "no physical evidence" that Mr. Cook was exceeding his estimated speed immediately prior to the collision, or that Mr. Cook was not "fully stopped" at the time of the accident. *Id.*

This lawsuit was filed in December 2010. CP 3. In February 2012, the County requested access to Mr. Cook's truck so that one of the County's expert witnesses could inspect the truck. CP 30, 33-34. Mr. Cook responded by advising the County that the truck was no longer available, as Mr. Cook had authorized it to be parted out and sold after his own expert examined the truck. *Id.*

Mr. Cook's truck had been fitted with an Airbag Control Module (ACM). CP 13. Diagnostic tools are able to recover crash-related data from the ACM, including a vehicle's speed in the moments before a collision, as well as the vehicle's speed at the time of a collision. CP 14-16. Since Mr. Cook's speed was an issue in this accident,³ and since Mr.

² On July 8, 2014, Tarbet Logging designated Dr. Gill's report in a Designation of Supplemental Clerk's Papers. The superior court has not yet assigned clerk's papers numbers for Dr. Gill's report. The County will file a supplemental brief once clerk's paper numbers have been assigned.

³ As it relates to Mr. Cook's claims against the County, Mr. Cook's speed was an issue primarily as it relates to Mr. Cook's comparative fault. As set

Cook disposed of the truck, including the ACM, after his expert (Dr. Gill) had the opportunity to inspect the truck, but before the defense had the opportunity to inspect the truck and download the data from the ACM, the County brought a motion asking the trial court to find spoliation and exclude Dr. Gill's opinions relating to the speed of the vehicles. CP 50-51. The trial court granted the motion, finding that: (1) Mr. Cook's vehicle, and in particular the ACM, were important and relevant evidence; (2) given the importance and relevance of the evidence, and given Mr. Cook's preservation of that evidence until his own expert examined the truck, Mr. Cook had a duty to preserve the evidence until the defense had the opportunity to inspect it; (3) Mr. Cook was culpable for spoliation by disposing of the truck prior to the defense having the opportunity to inspect the truck; and (4) absent remedies ordered by the court, the defense would be prejudiced by the spoliation. CP 119-125.

Based upon its finding of spoliation, the trial court excluded any testimony of Dr. Gill as it relates to the speeds of the vehicles involved in the accident. CP 124, RP 35. The trial court did not exclude Dr. Gill's other opinions, including his opinions regarding the adequacy of the snowplowing on Dead Medicine Road. CP 119-125. The trial court

forth herein, since the jury did not find the County liable, Mr. Cook's speed, as it relates to his claim against the County, proved immaterial.

reserved ruling on whether it would instruct the jury on the finding of spoliation. RP 35.

B. Pretrial Motions Regarding Dr. Richard Gill

In pre-trial motions, Mr. Cook sought to exclude any testimony or argument regarding "Richard Gill's precluded speed testimony pursuant to the court's prior order *in limine on spoliation*." CP 138. At the hearing on the motion, Mr. Cook clarified that he was seeking to exclude any reference to the fact that Dr. Gill examined the truck before it was destroyed, as such evidence would "create an inference that Dr. Gill's opinions were bad." RP 68. The trial court requested additional briefing on the issue of whether the defense should be able to question Mr. Cook about Dr. Gill's inspection of the truck and the truck's subsequent destruction, and/or whether the trial court should instruct the jury on spoliation. RP 69. The County subsequently submitted the supplemental briefing requested by the trial court. CP 335-337.

The trial court revisited the issue prior to Mr. Cook taking the witness stand. RP 745. The defense position was that the exclusion of Dr. Gill's opinions regarding speed did not wholly cure the prejudice caused by Mr. Cook's knowing destruction of the evidence, and that in order to cure that prejudice, the trial court needed to (1) allow the defense to cross-examine Mr. Cook about the inspection of the truck and its subsequent

destruction; and (2) instruct the jury regarding Mr. Cook's destruction of the evidence. CP 335-337, RP 746-752.

At the hearing on the matter, Mr. Cook advised the trial court that he did not "have any concern with [the defense] asking Mr. Cook what happened to the truck," or "any concern with [the defense] establishing the fact that the truck was parted out." RP 762-763. Mr. Cook specifically advised the trial court that his objection was limited to the giving of a spoliation instruction:

No. I don't object to the discussion of the loss of the truck. I mean, they're perfectly free to elicit that testimony and argue to the jury that they should enter a negative inference, because Mr. Cook – or, you know, take whatever inference they want from that, but consider the fact that Mr. Cook got rid of this truck before they even filed a lawsuit, before our defense experts ever had an opportunity to examine it. All of that can be brought out in testimony and in an argument. I'm just saying that the further addition of the instruction along with the removal of Dr. Gill or even the mention of Dr. Gill would be highly prejudicial at this point, specifically given the fact that the court has made a finding of no bad faith.

RP 764

The trial court concluded that it would permit the defense to elicit testimony about the ACM and the fact that it was destroyed after Mr. Cook's expert examined the truck. RP 770-771. However, the trial court concluded that it would not instruct the jury on spoliation. RP 772-74.

C. Trial Testimony Regarding The Width Of The Road And Whether It Was A Proximate Cause Of The Accident.

As noted, Mr. Cook's sole claim against the County was based upon the assertion that the County had not plowed Dead Medicine Road to a "reasonable" width and that the same was a proximate cause of the accident. However, the evidence presented at trial established that not only was the road was plowed to a reasonable width, but also that the plowed width of the road was not a proximate cause of the accident. As such, the trial court's exclusion of Dr. Gill's testimony regarding the speeds of the vehicles was immaterial to the jury's determination as it relates to Mr. Cook's negligence claim against the County.

1. Mr. Cook's Lay Witnesses

Mr. Cook called a number of witnesses at trial who testified regarding the width of Dead Medicine Road at the location of the accident, as well as the facts of the accident itself and whether the width of the road was a causative factor in the accident. That testimony established that the accident was the result of the two vehicles meeting on a very slick, icy and narrow road while rounding a blind corner.

a. Mr. Joshua Cook

Joshua Cook is Ray Cook's son. RP 184. Shortly after the accident, Joshua received a phone call advising him that his father had been in an

accident. RP 189-190. After the phone call, Joshua proceeded to the accident scene, arriving approximately 45 minutes later. RP 186, 193.

Joshua further testified:

- The underlying roadway surface of Dead Medicine Road at the location of the accident is one of the narrowest places on Dead Medicine Road. RP 231
- The accident occurred at a curve in the road where there is not a lot of visibility as it relates to oncoming vehicles. RP 230
- Mr. Cook and Stevens County Deputy Sheriff Loren Erdman "measured" the plowed width of the road as being 13' 9". RP 208
- The two points between which Mr. Cook and Deputy Erdman "measured" are seen in Exhibit 211, pg. 32. RP 235, Appendix B.⁴

b. Delbert Hallam

- Mr. Hallam is Mr. Cook's neighbor and has lived on Dead Medicine Road for 46 years. RP 245
- The location of the accident was at a blind corner. RP 277
- The location of the accident was one of the narrowest spots on Dead Medicine Road. RP 277

⁴ On July 22, 2014, the County designated Exhibit 211 as part of its Designation of Supplemental Clerk's Papers. The superior court has yet to assign clerk's paper numbers to the supplemental designations.

c. Stevens County Deputy Sheriff Julie Melby

- The location of the accident was at a blind corner. RP 306-307
- When she interviewed Mr. Cook after the accident, he told her that he was driving approximately 20 mph when he came around the corner and saw the logging truck in the middle of the road. Both vehicles pulled as far to their respective right as they could. He also reported that there was nothing either driver could have done to prevent hitting each other. RP 309
- Mr. Bean advised her that he was pulled as far to the right as he could. RP 315
- The location of the accident was a "particularly difficult corner." RP 306
- The location of the accident was a blind corner. RP 306-307
- The road at the location of the accident was so slick that she could "hardly walk" to the scene. RP 299

d. Stevens County Deputy Sheriff Loren Erdman

- At the time of trial, Deputy Erdman had been employed at the Stevens County Sheriff's Office for 18 ½ years. RP 494
- The accident location was at a blind corner. RP 553
- At the scene of the accident, Mr. Cook advised Deputy Erdman that immediately prior to the accident, he (Mr. Cook) was driving

across the center of the road, and after seeing the oncoming logging truck, did not have time to get over far enough to his right prior to impact. RP 553

- Deputy Erdman "paced" off the plowed width of the road at the site of the accident as being "approximately 15 feet." RP 554
- The width of the road was not important to Deputy Erdman, and therefore was not a "focus" of his. As such, he did not get exact measurements. RP 554
- The location of the accident is one of the more narrow places on Dead Medicine Road. RP 554
- If both vehicles had been traveling very slowly, there was room for them to pass each other. RP 555

e. Shane Bean

- When Mr. Bean saw Mr. Cook's vehicle, Mr. Bean pulled as far to his right as he could. RP 692
- Had Mr. Bean pulled any further to his right, he would have gone over the edge of the embankment adjacent to the road. RP 692
- The right front tires were within six to eight inches of going over the embankment. RP 692
- Mr. Bean drove into the berm to avoid the accident. RP 692

- The berm did not preclude Mr. Bean from moving to the right as far as he could in an effort to avoid the collision. RP 692
- When Mr. Cook's vehicle hit Mr. Bean's vehicle, Mr. Cook's vehicle was not as far over to Mr. Cook's side of the road as was possible. RP 693

f. Shannon Wolfrum

- Mr. Wolfrum has been employed as an equipment operator for Stevens County Public Works for a little over eight years. RP 704
- On February 6, 2009, he was sanding Dead Medicine Road when he came upon the accident scene. RP 710
- Dead Medicine Road was extremely slick that day. RP 711
- The road was so slick that when Mr. Wolfrum got out of his vehicle (at the accident scene) he "almost fell down." RP 711

g. Arlene Cook

- Arlene Cook and her husband have lived on Dead Medicine Road since 1998. RP 887
- The location of the accident is at a "bad corner." RP 889
- Even in the summer, there is barely enough room for two "regular" cars to pass at the location of the accident. RP 890

- Even in the middle of summer, a logging truck and a car would need to go really slow and stay close to the edge in order to pass each other at the blind corner in question. RP 890
- It is hard to see around the blind corner to determine whether there is a vehicle coming in the other direction. RP 891

2. Mr. Cook's Own Testimony

- Dead Medicine Road was slick on the day of the accident. RP 1079-80
- When Mr. Cook first saw the Tarbert vehicle, it was in the center of the roadway. RP 1073
- When Mr. Cook rounded the blind corner, he was surprised to discover a logging truck "shooting" at him. RP 1083
- When Mr. Cook first saw the Tarbert vehicle, Mr. Cook was as far to his right as possible ("up against the bank"). RP 1073, 1075-76
- The impact between the Tarbert vehicle and Mr. Cook's vehicle occurred in Mr. Cook's lane of travel. RP 1075, 1076
- Mr. Cook also testified as follows:
 - Q. So, given those facts, sir, you would agree with me that the width of the plowed road made no difference in this collision.
 - A. Oh, I see what you're saying. It's like the old pilot, the air above you and the runway behind you does you no good. **The road could have**

been a thousand feet wide, your right, and he was still on the bank on my side of the road, yes, that's true. Okay.

RP 1076 (emphasis added)

3. Mr. Cook's Expert Witness

Mr. Cook called Dale Keep as an expert to testify regarding liability issues relating to Stevens County. Mr. Keep testified:

- Reasonable snow plowing requires that the snow be removed until the width of the roadway surface that customary traffic is used to is accomplished. RP 377
- Proper snow plowing necessitates plowing a width of travel comparable to non-snow conditions for customary traffic. RP 378
- Proper snow plowing necessitates plowing to a width comparable to the "normal traveled way." RP 377-78, 381
- The "normal traveled way" is where people "typically drive." RP 380. As such, proper snow plowing required the County to plow the road as wide as the area where people typically drive. RP 387

4. Stevens County's Expert Witnesses

As noted, Mr. Keep identified the standard by which the jury was to evaluate the reasonableness of the County's plowing of Dead Medicine Road: The road should be plowed to a comparable width of the "normal traveled way." This is significant because the testimony of the County's

experts established that Dead Medicine Road at the location of the accident was actually plowed wider than the "normal traveled way." This testimony was not rebutted by Mr. Cook.

a. John Hunter

- Mr. Hunter used photogrammetry (RP 1184-1187) to measure the "traveled portion" or "traveled way" of Dead Medicine Road. RP 1187-88
- Through the use of photogrammetry, Mr. Hunter determined the normal traveled roadway width at the location in question as being "17 feet, plus or minus, depending." RP 1188-89
- Through the use of photogrammetry, Mr. Hunter determined the plowed width of Dead Medicine Road to be "about 18 and a half feet" at the area of impact. RP 1189, 1237
- The measurement of the normal traveled roadway of Dead Medicine Road was accurate to within less than a tenth of an inch. RP 1200
- The measurement of the plowed width of Dead Medicine Road was accurate to within three inches. RP 1200

b. Wilfred Nixon

- Dr. Nixon is a professor of civil and environmental engineering with a particular area of expertise in transportation. RP 1253.

- Reasonable snow plowing requires a municipal entity to plow its roads to the "width of the regularly traveled way, where the vehicles normally drive on the road." RP 1260
- Stevens County's plowing of Dead Medicine Road was reasonable, as Stevens County plowed the road "to a width that was consistent with the traveled way width of the road at that location." RP

Mr. Cook's liability expert (Dale Keep) conceded on cross-examination that if Mr. Hunter's photogrammetric analysis is accurate (which is something he could not dispute, RP 376), he would agree that the County's plowing of Dead Medicine Road was "reasonable." RP 386-387. Mr. Hunter's photogrammetric analysis established that the plowed width of Dead Medicine Road at the location of the accident was wider than the "normal traveled way." Thus, according to Mr. Cook's own liability expert, and pursuant to the reasonableness standard identified by that liability expert, if the jury found Mr. Hunter's opinions credibility, the jury could arrive at no conclusion other than the one it actually reached – that the County was not negligent.

III. ARGUMENT

“We review a trial court's decisions regarding sanctions for discovery violations for abuse of discretion.” *Homeworks Constr., Inc. v.*

Wells, 133 Wash.App. 892, 898, 138 P.3d 654 (2006). A trial court abuses its discretion when its decision is manifestly unreasonable or based on untenable grounds or untenable reasons. *Mayer v. Sto Indus., Inc.*, 156 Wash.2d 677, 684, 132 P.3d 115 (2006). The trial court has considerable discretion in specifying the consequences of spoliation and will not be reversed except for an abuse of discretion. *Henderson v. Tyrrell*, 80 Wash.App. 592, 604, 910 P.2d 522 (1996).

A. The Trial Court Did Not Abuse Its Discretion In Finding Spoliation.

In deciding whether to apply a spoliation inference, Washington courts use two general factors: (1) the potential importance or relevance of the missing evidence and (2) the culpability or fault of the adverse party. *Henderson*, 80 Wash.App. at 607. Whether the missing evidence is important or relevant depends on the particular circumstances of the case. *Henderson*, 80 Wash.App. at 607. In weighing the importance of the evidence, courts consider whether the adverse party was given an adequate opportunity to examine it. *Id.* As for culpability, courts examine whether the party acted in bad faith or conscious disregard of the importance of the evidence or whether there was some innocent explanation for the destruction. *Henderson*, 80 Wash.App. at 609. Another important factor is whether the party violated a duty to preserve the evidence. *Henderson*, 80

Wash.App. at 610; *See also, Tavai v. Walmart Stores, Inc.*, 176 Wash. App. 122, 135, 307 P.3d 811 (2013).

In this case, the trial court's spoliation finding was premised on the following. On March 25, 2009 (approximately six weeks after the accident), Mr. Cook had his expert witness, Dr. Gill, inspect Mr. Cook's truck. CP 115. Based in part upon that inspection, Dr. Gill issued a report containing opinions unfavorable to both the County and Tarbert Logging. *Appendix A*. In that report, Dr. Gill rendered the opinion that there is "insufficient information to conclude that Mr. Cook's actions and/or inactions were a significant contributing factor to this collision." *Appendix A*. Specifically, Dr. Gill concluded that there is "no physical evidence" that Mr. Cook was exceeding his estimated speed immediately prior to the collision, or that Mr. Cook was not "fully stopped" at the time of the accident. *Appendix A*. Subsequent to Mr. Gill's inspection, but before the defense had the opportunity to examine the truck, Mr. Cook disposed of the truck, precluding the defense from examining the truck. CP 29-30.

The importance and relevance of the evidence (both the truck itself and the ACM) as it relates to the speed of the vehicles cannot be disputed. *See, e.g.*, CP 13-16. Indeed, Mr. Cook does not argue in this appeal that the evidence was not relevant or important. Instead, Mr. Cook makes the

following unpersuasive arguments, which for the reasons set forth herein should be rejected by the Court.

First, Mr. Cook argues that the "vehicle at issue was not owned by the Cooks." *Appellants' Brief*, pg. 16. This argument, which is not supported by any case law, ignores the fact that Mr. Cook had access to and control of the vehicle, and that Mr. Cook's own attorney (Dayle Anderson) authorized the destruction of the evidence.

Joshua Cook is Ray Cook's son. CP 106. Joshua owns and operates an LLC known as JBC & Sons LLC (Joshua B. Cook & Sons). CP 104. After the accident, the truck that Mr. Cook was driving at the time of the accident in question was taken back to JBC's indoor shop. CP 107-08. Joshua was storing the truck at the specific instruction of Mr. Anderson: "[H]e told me to store the truck and not do anything with it for a while." CP 112. Mr. Anderson told Joshua Cook that he "needed to keep it, keep it whole and keep it inside. *Id.*

After Dr. Gill examined the truck, it was parted out and sold:

Q. What became of the truck?

A. What became of it after Dayle Andersen and I and everybody looked at it?

Q. Correct.

A. I asked Dayle if we could part it out and sell it.

Q. Okay. And Mr. Andersen told you you could?

A. Yes.

CP 108-09

Mr. Cook was aware that Joshua was parting off the truck and selling it. CP 112.⁵ Washington case law on spoliation does not permit parties to rely upon technical distinctions over corporate ownership. The test is *control*, which Mr. Cook unquestionably exercised. *See, Pier 67, Inc. v. King County*, 89 Wash.2d 379, 385-86, 573 P.2d 2 (1977) ("[W]here relevant evidence which would properly be a part of a case is within the control of a party whose interests it would naturally be to produce it and he fails to do so..."). The only competent evidence in this case demonstrates unequivocally that Mr. Cook exercised control over the vehicle in question.⁶ Mr. Cook's arguments relative to corporate

⁵ Further, Mr. Cook is charged with the knowledge of his counsel with respect to spoliation issues: "Similarly here, even though Mr. Tyrrell testified he was unaware of defense counsel's request that the car be preserved, he can be charged with knowledge through his attorney." *Henderson v. Tyrrell*, 80 Wash. App. 592, 611, 910 P.2d 522 (1996).

⁶ It is also of note that Mr. Cook had control of the truck (as his work vehicle) at the time of the accident, and was driving the truck at the time of the accident and that he referred to the truck as "my pickup." CP 118

ownership of the vehicle are not persuasive and do not establish that the trial court abused its discretion in finding spoliation.

Second, citing to *Henderson v. Tyrrell* and *Homeworks Constr., Inc. v. Wells*, Mr. Cook argues that he was under no duty to preserve the evidence. Mr. Cook's argument that there is no general duty to preserve evidence on the part of a party to a claim or potential claim is incorrect.

The Court in *Henderson* quoted with approval the following language: "Even where an action has not been commenced and there is only a potential for litigation, the litigant is under a duty to preserve evidence which it knows or reasonably should know is relevant to the action." *Henderson*, 80 Wash.App. at 611, quoting, *Fire Ins. Exch. v. Zenith Radio Corp.*, 103 Nev. 648, 649, 747 P.2d 911 (Nev. 1987). This view of the duty to preserve is neither unique nor novel. In the most frequently cited case on spoliation, the court recognized that the legal duty to preserve evidence is not dependent upon a request from the adverse party: "The obligation to preserve evidence arises when the party has notice that the evidence is relevant to litigation or when a party should have known that the evidence may be relevant to future litigation." *Zubulake v. UBS Warburg*, 220 F.R.D. 212 (S.D.N.Y. 2003), quoting, *Fujitsu Ltd. v. Federal Express.*, 247 F.3d 423 (2d. Cir. 2001).

Relying on *Henderson*, Mr. Cook argues that there was no duty to preserve the evidence because he was not "requested to maintain the vehicle through either discovery or a litigation hold letter." *Appellants' Brief*, pg. 19. This argument ignores the fact that Mr. Cook's vehicle was destroyed *before the commencement of litigation*. The destruction of the vehicle occurred the winter after it was inspected by Dr. Gill. CP 110. Dr. Gill's inspection took place on March 25, 2009. CP 115. Mr. Cook did not file this lawsuit until December 27, 2010. CP 1-7. Based upon the testimony of Joshua Cook and Dr. Gill, the destruction of the vehicle occurred in the winter of 2009-2010. The instant lawsuit was not filed until the following winter.

Further, the holding *Henderson* was expressly based upon the fact that the litigant seeking a finding of spoliation was given the opportunity to examine the evidence prior to its destruction:

Given the difficulty and potential expense of storing evidence as large as a car, and in light of Mr. Tyrrell's explanation that the car reminded him of the accident, the trial court reasonably concluded the "real culprit here was the passage of time." The Hendersons had ample opportunity to obtain the evidence they now claim was essential to their case. Mr. Tyrrell should not bear the burden of their failure to do so. The trial court did not abuse its discretion by refusing to dismiss the case or limit Mr. Tyrrell's evidence at trial.

Henderson, 80 Wash. App. at 611.

That must be contrasted to the facts of this case, which establish that Mr. Cook knew that the evidence was relevant and significant, as he preserved the evidence so that his own expert could inspect it. Indeed, Mr. Cook's attorney specifically directed that the vehicle be maintained "whole" and "inside" until Dr. Gill inspected it. CP 112. Then, after Dr. Gill inspected the truck, Mr. Anderson gave express permission to destroy the vehicle. CP 109.

Mr. Cook's reliance upon *Homeworks Constr., Inc. v. Wells* is similarly unavailing for him. In *Homeworks*, the Court noted that *Henderson* "did not suggest that potential plaintiffs have a general duty to preserve all evidence." *Homeworks Const., Inc. v. Wells*, 133 Wash. App. at 901. However, contrary to Mr. Cook's argument, *Homeworks* does not stand for the proposition that a "duty must be established by statute, regulation, under common law, or by way of notice between the parties." *Appellants' Brief*, pg. 19. Rather, in *Homeworks*, the Court was unwilling to find the existence of a duty to preserve because Homeworks did not have "control" over the evidence in question. *Homeworks*, 133 Wash. App. at 901. Specifically, the Court was unwilling to impose a duty on Homeworks to "prevent" the possessors of the evidence from destroying the evidence when Homeworks "did not know" the possessors were going to destroy it. *Id.* The Court, however, noted: "We do not address the

situation in which a party knows that a third person is going to destroy evidence and does nothing about it." *Homeworks*, 133 Wash. App. at 901, fn. 2. Here, Mr. Cook was not only aware that the evidence was going to be destroyed, but actually authorized the same (through his attorney).

Mr. Cook's duty to preserve the evidence arose the minute he had Dr. Gill inspect the truck. At that point, Mr. Cook knew of the importance of the evidence, knew that he was going to present expert testimony supporting his forthcoming lawsuit and knew that the expert testimony would be based upon the inspection of the truck. This is not a case in which a party unknowingly disposed of evidence that was later discovered to have been relevant. Rather, this is a case in which a party made a calculated decision to have an expert examine the evidence for trial purposes. Having done that, Mr. Cook had a duty to preserve the evidence to give the defense the equal opportunity to examine the evidence. Any finding to the contrary would encourage parties to destroy evidence known to be relevant to forthcoming litigation.

Finally, Mr. Cook argues that he did not obtain an "investigative advantage" because "no party had access to the airbag control module." *Appellants' Brief*, pg. 20. Mr. Cook argues further argues that there was at no "investigative advantage" because "all of the experts used the same information to develop their opinions regarding the cause of the collision."

Id. Mr. Cook's argument in this regard ignores the fact that alleged absence of the "investigative advantage" is the product of the trial court's spoliation ruling. That is, had the trial court not excluded Dr. Gill's speed opinions, Mr. Cook would certainly have had the "investigative advantage" of having had his expert actually inspect the truck, while the defense experts would be forced to rely on photographs and measurements that may or may not be accurate, while at the same time not having access to the "best evidence" available (the ACM). To the extent the playing field was leveled, it was only because the trial court properly found spoliation and excluded Dr. Gill's speed opinions.

In addition, Mr. Cook's argument about the purported absence of an "investigative advantage" focuses solely on the testimony of the experts and ignores his own testimony in this case. That is, Mr. Cook was one of only two eye-witnesses to the accident. He testified at trial regarding his own speed, and that he was allegedly "stopped" at the point of impact. RP 966. By destroying the evidence that could have proved his testimony to be false, Mr. Cook gained an evidentiary advantage on the defense.

Finally, in arguing that any "investigative advantage" was "illusory," Mr. Cook complains that the trial court allowed the defense experts to utilize the evidence collected by Dr. Gill in his inspection of the vehicle. *Appellants' Brief*, pg. 20. Mr. Cook's argument in this regard

ignores the fact that he did not raise this issue before the trial court. He did not pursue a motion to preclude the defense experts from relying on the evidence generated by Dr. Gill (i.e., photographs and measurements) and he did not otherwise object to the defense experts' reliance on that evidence. Mr. Cook is precluded now from raising that issue for the first time on appeal. "Generally, appellate courts will not entertain issues raised for the first time on appeal." *In re Guardianship of Cornelius*, 326 P.3d 718, 728 (2014), citing RAP 2.5(a); *Brundridge v. Fluor Fed. Servs., Inc.*, 164 Wash.2d 432, 441, 191 P.3d 879 (2008).

Mr. Cook's complaint that the defense experts relied upon the evidence gathered by Dr. Gill also ignores the fact that the reason the defense experts had to rely on the photographs and measurements produced by Dr. Gill is because Mr. Cook destroyed the truck. Mr. Cook's destruction of the evidence caused the need for the defense to rely upon Dr. Gill's measurements and photographs. Further, the trial court's spoliation ruling merely excluded Dr. Gill's speed-related opinions – not the work generated by Dr. Gill.

The trial court did not abuse its discretion in finding that Mr. Cook's destruction of the evidence constitutes spoliation. The destroyed evidence was relevant to the issue of speed, and given the fact that Mr. Cook had an expert examine the truck before it was destroyed, and that it

was destroyed with the knowledge and approval of counsel, establish the necessary culpability prong of a spoliation finding.

B. The Trial Court's Sanction Was Proper.

In crafting an appropriate sanction, the trial court weighs (1) the potential importance or relevance of the missing evidence; and (2) the culpability or fault of the adverse party. *Homeworks*, 133 Wash. App. at 899, citing *Henderson*, 80 Wash.App. at 607. The importance of the evidence has not been disputed by Mr. Cook. In determining the adverse party's culpability, "the trial court can consider the party's bad faith, whether that party had a duty to preserve the evidence, and whether the party knew that the evidence was important to the pending litigation." *Id.*

Spoliation is "usually intended as a term of art, referring to the legal conclusion that a party's destruction of evidence was in bad faith or under other circumstances such that admissibility and the other negative consequences ... should follow." 5 Karl B. Tegland, *Washington Practice: Evidence* § 402.6, at 286 (5th ed.2007). But "spoliation encompasses a broad range of acts beyond those that are purely intentional or done in bad faith." *Homeworks*, 133 Wn.App. 900, citing *Henderson*, 80 Wash.App. at 605, 910 P.2d 522). "The problem historically has been treated as an evidentiary matter; the common remedy is an inference 'that the adversary's conduct may be considered generally as tending to corroborate

the proponent's case and to discredit that of the adversary.'" *Henderson*, 80 Wash.App. at 605, *quoting* 2 John W. Strong, McCormick on Evidence § 265, at 192 (4th ed.1992). "To remedy spoliation the court may apply a rebuttable presumption, which shifts the burden of proof to a party who destroys or alters important evidence." *Marshall v. Bally's Pacwest, Inc.*, 94 Wash.App. 372, 381 972 P.2d 475 (1999).

As Mr. Cook argued to the trial court, in fashioning a remedy to cure the spoliation of evidence, the trial court had a wide range of options, ranging from the "most draconian egregious" (dismissal) to the "least" severe (jury instruction). RP 757-758. The trial court chose the middle approach – striking the testimony of Dr. Gill. This is a remedy with which Mr. Cook does not appear to contest. Rather, Mr. Cook takes issue with the trial court authorizing the defense to inform the jury that Mr. Cook had retained an expert, that the expert examined the truck and that Mr. Cook subsequently disposed of the truck. *Appellants' Brief*, pgs. 21-27. For the following reasons, Mr. Cook's argument is not persuasive.

First, Mr. Cook specifically advised the trial court that he did not object to the defense eliciting this testimony from the witnesses. RP 764. Mr. Cook cannot now complain about a line of questioning that he advised the trial court he had no objection to the defense asking. Under the invited error doctrine, a party may not set up an error at trial and then complain of

it on appeal. *In re Pers. Restraint of Thompson*, 141 Wash.2d 712, 723, 10 P.3d 380 (2000). The doctrine applies when a party takes affirmative and voluntary action that induces the trial court to take an action that party later challenges on appeal. *Thompson*, 141 Wash.2d at 723–24.

Second, and perhaps because he agreed to the line of questioning at issue, Mr. Cook did not object to the questions posed of the witnesses regarding the inspection of the truck and its subsequent disposal. Mr. Cook simply did not preserve this issue for appeal.

Third, the very purpose of a spoliation sanction is to create an inference that the destroyed evidence was negative to the party destroying the evidence:

W]here relevant evidence which would properly be a part of a case is within the control of a party whose interests it would naturally be to produce it and he fails to do so, without satisfactory explanation, the only inference which the finder of fact may draw is that such evidence would be unfavorable to him.

Pier 67, Inc. v. King County, 89.Wash.2d at 385–86.

Simply striking the speed-related opinions of Dr. Gill did not remedy the harm caused by the destruction of the evidence. Without the jury being made aware that the Mr. Cook had an expert examine the truck and that the truck was subsequently destroyed, the inference that the evidence was negative to Mr. Cook would never have arisen. To cure Mr.

Cook's destruction of the evidence, and create the inference that arises from that destruction, the jury either (1) needed to be made aware of the fact that an expert examined the truck; or (2) be instructed on spoliation. Mr. Cook advocated for the former, and the trial court properly allowed that evidence to be presented to the jury.

Finally, the finding of spoliation and the inference that arises therefrom is a "rebuttable presumption." *See, Marshall v. Bally's*, 94 Wash. App. at 381. Once the inference applies, the burden of proof shifts to the "party who destroys or alters important evidence." *Id.* Mr. Cook was allowed to rebut the presumption through his own testimony. The jury was free to disregard the inference and believe Mr. Cook's testimony that he was stopped at the time of the collision.

C. The Excluded Evidence Proved Irrelevant To Mr. Cook's Claim Against Stevens County.

As noted above, Mr. Cook's negligence claim against the County was premised entirely upon the theory that the County negligently plowed Dead Medicine Road. As it relates to that claim, Mr. Cook's speed at the time of his collision with the Tarbert Logging truck was only relevant to the issue of whether Mr. Cook was comparatively at fault for the accident. Since the jury concluded that the County was not negligent, Mr. Cook's

comparative fault never arose. As such, even assuming *arguendo* that the trial court's spoliation rulings were in error, those errors were harmless.

When a trial court makes an erroneous evidentiary ruling, the question on appeal becomes “whether the error was prejudicial, for error without prejudice is not grounds for reversal.” *Brown v. Spokane County Fire Prot. Dist. No. 1*, 100 Wn.2d 188, 196, 668 P.2d 571 (1983). An error will be considered not prejudicial and harmless unless it affects the outcome of the case. *Brown*, 100 Wn.2d at 196. “[I]mproper admission of evidence constitutes harmless error if the evidence is cumulative or of only minor significance in reference to the evidence as a whole.” *Hoskins v. Reich*, 142 Wn. App. 557, 570, 174 P.3d 1250 (2008).

In order to overturn the jury's verdict in favor of the County, Mr. Cook must establish that “the trial's outcome would have been materially affected had the error not occurred.” *Cobb v. Snohomish Cnty.*, 86 Wash. App. 223, 236, 935 P.2d 1384 (1997), citing *State v. Braham*, 67 Wash.App. 930, 939, 841 P.2d 785 (1992). A jury's “verdict will not be set aside unless the court can say, as a matter of law, that there is neither evidence nor reasonable inference from the evidence to support the verdict.” *Arnold v. Sanstol*, 43 Wash.2d 94, 98, 260 P.2d 327 (1953); See also, *Thomas v. French*, 99 Wash.2d 95, 105, 659 P.2d 1097 (1983) (error

without prejudice is not grounds for reversal and error will not be considered prejudicial unless it affects the outcome).

Pursuant to jury instructions (which were not objected to by Mr. Cook), the jury was advised that the basis for Mr. Cook's claim against the County was the assertion that "Stevens County had failed to plow Dead Medicine Road wide enough for two vehicles to safely pass." RP 1279. The jury was further instructed: "The plaintiff, Raymond Cook, claims that...Stevens County was negligent by failing to properly plow the roadway to a safe width." RP 1282.

Mr. Cook's liability/standard of care expert was Dale Keep. Mr. Keep testified that "reasonable" snowplowing requires a county to plow snow to a width comparable to the "ordinary traveled way." RP 377-78, 381. That was the standard set by Mr. Cook by which the jury was asked to evaluate the reasonableness of the County's plowing of Dead Medicine Road. The evidence presented to the jury in that regard was that the "normal traveled way" at the location of the accident was 17 feet, RP 1188-89, and that the plowed width of the road at the time of the accident was 18' 6". RP 1189, 1237. Mr. Keep testified that if the jury found Mr. Hunter's testimony credible, the jury could conclude that the County's plowing of Dead Medicine Road was reasonable. RP 386-387. Since Mr. Cook did not put on any testimony to rebut Mr. Hunter's opinions, and

since the jury concluded that the County was not negligent, the jury obviously found Mr. Hunter's testimony and opinions credible. Once the jury concluded that the County's snowplowing of Dead Medicine Road was reasonable, the issue of Mr. Cook's speed became irrelevant.

Further, and equally important, the jury was told by Mr. Cook himself that the plowed width of the road was not a proximate cause of this accident. "The road could have been a thousand feet wide, your right, and he was still on the bank on my side of the road, yes, that's true." RP 1076. In light of Mr. Cook's testimony in this regard, the exclusion of Dr. Gill's testimony regarding Mr. Cook's speed at the time of the accident cannot be said to have prejudiced Mr. Cook, and/or affected the outcome of the trial. Had Dr. Gill's speed-related opinions not been excluded, he would have testified consistent with Mr. Cook's own testimony (i.e., that Mr. Cook was stopped at the time of the collision). Since Mr. Cook testified that the accident occurred in his lane of travel [RP 1075], and that the accident would have happened even if the road was "a thousand feet wide," Mr. Cook cannot establish that the exclusion of the speed testimony in any manner affected the outcome of the trial as it relates to his claim against the County. Mr. Cook's own testimony established that the width of the road was not the cause of the accident, making issues regarding speed irrelevant in his claim against the County.

Mr. Cook's also testified that speed was not a cause of the accident. Specifically, he testified that he was pulled over as far to the right as possible and that the Tarbert vehicle slid into his lane of travel. RP 1076. Had Dr. Gill's opinions not been excluded and the jury concluded that the accident occurred exactly as described by Mr. Cook, the same would not have resulted in any liability to the County. As a result, the exclusion of Dr. Gill's speed-related opinions did not affect the outcome of trial.

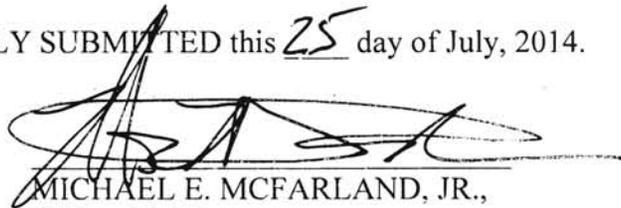
D. The County Is Entitled to Fees on Appeal Under RAP 18.1.

The County was the prevailing party in this action, having obtained affirmative relief below. Pursuant to RAP 18.1, and RCW 4.84.010, the County requests that upon affirming the jury's verdict in this case, the Court award the County its costs including statutory attorneys' fees incurred in this appeal.

IV. CONCLUSION

For the reasons set forth herein, Respondent Stevens County respectfully requests that the Court affirm the jury's verdict.

RESPECTFULLY SUBMITTED this 25 day of July, 2014.



MICHAEL E. MCFARLAND, JR.,
WSBA 23000
Attorney for Petitioner Stevens County

CERTIFICATE OF SERVICE

I certify under penalty of perjury under the laws of the State of Washington that on the 25th day of July, 2014, a true and correct copy of the foregoing *Brief of Respondent Stevens County*, was served upon the following parties and their counsel of record in the manner indicated below:

F. Dayle Andersen	Via Regular Mail	[]
Ken Kato	Via Certified Mail	[]
1020 N. Washington	Via Overnight Mail	[]
Spokane, WA 99201	Via Facsimile	[]
	Hand Delivered	[✓]
Stephanie Bloomfield	Via Regular Mail	[✓]
Gordon Thomas Honewell PLLC	Via Certified Mail	[]
1201 Pacific Avenue, Suite 2100	Via Overnight Mail	[]
Tacoma, WA 98402	Via Email	[✓]
	Hand Delivered	[]



Kimberley L. Mauss

Appendix A



September 29, 2012

F. Dayle Anderson
c/o Andersen Stabb
Hilo Lagoon Centre
120 North Washington
Spokane, Washington 99201

Re: Cook vs. Stevens County

Dear Mr. Anderson:

As you requested, I have reviewed the file information your office provided concerning the above referenced collision. In addition, I had the opportunity to inspect the site of the subject collision, as well as Mr. Cook's pickup, wherein I took a number of photographs and measurements that were relevant to understanding the underlying causes of this collision.

The purpose of this report is to briefly summarize my findings and opinions to date. It is my understanding that discovery on this matter is continuing. As such, I reserve the right to expand and/or modify my analysis and opinions based on any additional discovery material that I am provided.

Opinion 1: At the time of the collision, the condition of the subject roadway created an unreasonable risk of harm to the traveling public; this inherently dangerous condition was the primary cause of the collision.

1. Stevens County made the decision to maintain/plow the roadway during the winter months so as to keep it open for travel by the public; as such, it had an obligation to maintain/plow the road in a reasonably safe manner.
2. The roadway width in the immediate area of the collision had only been plowed to a width of approximately 15 feet; yet the travel portion of the roadway was 20 feet or more, plus approximately 1 foot wide shoulders on either side. In other words, the roadway should have been plowed 50% wider than it was.
3. A plowed width of only 15 feet is too narrow to permit safely two-way traffic, particularly if one or more of the vehicles are commercial vehicles.
4. Motorists were not warned that the roadway narrowed to a single lane of travel.
5. The county knew or should have known that commercial vehicles were using the subject roadway (e.g. ongoing logging operations); use of the subject roadway by commercial vehicles exacerbated the hazardous condition created by the narrow road.

2104 West Riverside • Spokane, WA 99201 • 509-624-3714 telephone/fax

6. Given the nominal width of 8 feet for a commercial vehicle, even if the passenger side tires were at the extreme right hand of the roadway, the vehicle would still be over the "centerline" of the roadway.
7. The roadway leading up to the collision site had been plowed to a wider width sufficient to allow for two-way traffic; this would have created a false sense of security in drivers as they approached the area where the roadway narrowed to the point that it would no longer support two-way traffic.
8. The immediate area of collision was on a blind corner, which further exacerbated the hazardous condition created by the deficient plowing. Drivers would have less of an opportunity/advance warning to view oncoming vehicles, as well as to observe the narrowing of the roadway. In fact the curvature of the roadway would naturally "camouflage" the narrowness of the roadway.
9. The steep bank on one side of the roadway, along with the steep drop-off on the other side of the roadway, would tend to direct drivers more towards the center of the roadway (e.g. avoidance of a roadside hazard); as such, given the 15 foot width of the roadway, drivers would naturally be pushed over the "centerline" of the roadway. In other words, it would be expected that even passenger vehicle drivers (i.e. nominal width of 6 feet) would be crowding the centerline of the roadway.
10. The steep bank on one side of the roadway, along with the steep drop-off on the other side of the roadway, along with narrow shoulders (i.e. approximately 1 foot) meant drivers had virtually no escape route if oncoming traffic was over the centerline of the roadway.
11. The roadway was icy and had not been sanded; as such, the stopping distances would have been significantly increased, which is particularly dangerous on a blind curve on a roadway that is not plowed wide enough to support two-way traffic.

Opinion 2: Mr. Bean was driving across the centerline of the roadway, too fast for the conditions, and/or inattentive to his driving; such actions/inactions were a significant contributing factor to this collision.

1. Mr. Bean was a trained professional driver with a CDL; his training included training in safe driving and defensive driving. As such, he should have been better able to appreciate the hazardous conditions associated with the subject roadway than the general public.
2. As the operator of a large, commercial vehicle, Mr. Bean had an increased obligation to drive in a safe and defensive manner.
3. This was the third time Mr. Bean had driven over this portion of the roadway that morning (the collision occurred just after 10 AM); as such, he knew that the roadway narrowed to one-way traffic at the site of the collision.
4. Mr. Bean knew that he was coming into a blind curve, with a roadway that was not wide enough to support two-way traffic.
5. Given this knowledge, Mr. Bean knew that the only way for him to drive through the narrow passageway on the blind curve was to cross the centerline of the roadway, which was in direct violation of Tarbert Logging's safety rules.
6. At the time of the collision, Mr. Bean's truck was across the centerline.

7. Mr. Bean entered the blind curve at an excessively high rate of speed given the conditions; in his deposition, Mr. Bean estimated his speed at 25 to 30 MPH as he entered the blind curve; a blind curve where he knew that the roadway was not wide enough for two-way traffic.
8. Not only should Mr. Bean have decreased his speed to a very slow rate, he should have also activated his emergency flashers to alert other drivers to the hazard created by his vehicle (i.e. driving over the centerline; driving at an excessively slow speed than he should have been going), yet he failed to do so.
9. The physical evidence (e.g. the collision scene photographs), as well as the eyewitness testimony support the conclusion that Mr. Bean was not stopped at the time of the collision.
10. Mr. Bean knew that a Tarbert Logging safety rule required him to drive at a speed that would enable him to stop within one-half of the site distance; Mr. Bean violated this rule knowing that he was entering a blind curve that was not plowed wide enough to support two-way traffic.
 - a. Based on my site inspection, the nominal site distance at the scene was approximately 200 feet; clearly it was significantly less than 300 feet. As such, Mr. Bean should have been driving at a speed that would have enabled him to stop with 100 feet; certainly less than 150 feet.
 - b. Given Mr. Bean's testimony that he was driving at 25 to 30 MPH, along with the icy road conditions (i.e. an effective deceleration rate of 0.2 to 0.3 for a commercial vehicle), he would have needed approximately 190 to 250 feet to stop.
 - c. Alternatively, Mr. Bean testified that when he first observed Mr. Cook's vehicle he reacted by feathering the brakes for 6 to 7 seconds; using the same assumptions as above, along with an average deceleration from feathering the brakes of 0.15g, in 6.5 seconds Mr. Bean would have traveled approximately 215 feet and his speed at the end of that 6.5 seconds would have been 10 MPH.

Opinion 3: Based on the information that is available to me, there is insufficient information to conclude that Mr. Cook's actions and/or inactions were a significant contributing factor to this collision.

1. There is no evidence to suggest that Mr. Cook knew that roadway was not properly plowed that morning; that is, he did not know that the roadway would not support the passage of two vehicles at the same time. As such, Mr. Cook had no reason to be abnormally vigilant as he approached the collision scene.
2. Mr. Cook testified that he had slowed to 20 MPH as he approached the collision scene; he also testified that he was looking for a Tarbert Logging truck having just been passed by another one coming uphill. As such, Mr. Cook's total stopping distance for his pickup would have been approximately 65 feet. In other words, Mr. Cook would have been able to stop well short of half the nominal viewing distance.
3. In light of the foregoing, it was reasonable for Mr. Cook to approach the collision scene at 20 MPH.
4. There is no physical evidence that is contradictory to Mr. Cook's estimate of an approach speed of 20 MPH.

5. Mr. Bean estimated Mr. Cook's approach speed at 25 to 30 MPH, which would correspond to a total stopping distance of approximately 100 feet, which is not unreasonable.
6. Mr. Cook testified that he was fully stopped at the time of the collision, which is consistent with the foregoing analysis; furthermore, I am not aware of any physical evidence to the contrary.
7. In light of all of the foregoing, there is no basis to conclude that the speed at which Mr. Cook was driving was a significant contributing factor to this collision.
8. Mr. Cook testified that he was as far to the right hand side of the roadway as possible at the time of the collision; I know of no physical evidence to the contrary.
9. Given a plowed roadway width of 15 feet, and a nominal width of 6 feet for Mr. Cook's pickup, if his vehicle was to the far right hand side of the roadway, then he would not have been across the centerline of the roadway at the time of the collision.
10. In light of all of the foregoing, there is no physical basis to conclude that Mr. Cook's lateral lane position was a significant contributing factor to this collision.

Please let me know if you have any questions or if I can be of any further assistance in this matter. I look forward to continuing to work with you on this matter.

Sincerely,



Richard Gill, Ph.D., CHFP, CXLT
President and Chief Scientist



Applied Cognitive Sciences, Inc.

2012 Fee Schedule

	Rates Per Hour ¹	Sworn Testimony Per Hour ^{1,2}	Sworn Testimony Minimum Charge ¹
Rick Gill, Ph.D., CHFP, CXLT President and Chief Scientist	\$350	\$400	\$1200
Joellen Gill, MS, CHFP, CXLT Senior Engineer	\$200	\$250	\$750
Angela Colcombe, Ph.D. Associate Scientist	\$160	\$200	\$600
Zachary Doerzaph, Ph.D. Associate Engineer	\$200	\$250	\$750
Bill Hughes Safety Specialist	\$180	\$225	\$700

Notes:

1. Commercial flight time for all flights of 2 or more hours is billed at half-rate, plus expenses; all charges are portal to portal. Expedited work (i.e. work required to be completed within 5 business days) is billed at time-and-a-half.
2. All rates are plus expenses, including preparation of any requested materials by opposing counsel.

If you wish to retain us, we do request a \$1000.00 retainer and bill bi-monthly; checks should be made payable to Applied Cognitive Sciences, Inc.; Tax # 20-1883699.

Please let us know if you need any additional information or if we can be of any assistance. We look forward to working with you.

2104 W. Riverside Ave. • Spokane, WA. 99201 • (509) 624-3714 telephone/fax



**Sworn Testimony for Richard Gill, Ph.D., CHFP, CXLT
As of September 21, 2012**

2012:

Trials:

1. Cooper vs. Jefferson Hospital District; Port Townsend, Washington (State)
2. Rush vs. Devcon; San Jose, California (State)
3. Rengiil vs. Cho International, et al.; Hagåtña, Guam (Federal)
4. Crapo Farms, et al. vs. Spudnik; Blackfoot, Idaho (State)
5. Brady vs. Wenatchee School District; Wenatchee, Washington (State)
6. Gordon vs. EGT, et al.; Spokane, Washington (Federal)

Depositions/Arbitrations:

1. Rengiil vs. Cho International, et al.; Hagåtña, Guam
2. Abjea vs. Hunt Trucking; Chicago, Illinois
3. Rush vs. Devcon; San Jose, California
4. Grant Farms vs. Spudnik; Pocatello, Idaho
5. Donovan vs. City of Spokane; Spokane, Washington
6. Kitrosser vs. NuVasive, et al.; San Diego, California
7. Kotur vs. Kircher; Spokane, Washington
8. Wilson vs. Birge; Spokane, Washington (Arbitration)
9. Moorlag vs. Faber Brothers, et al.; Edmonds, Washington
10. Christ vs. Exxon; Eau Claire, Wisconsin
11. McNerney vs. Backstone, et al.; Spokane, Washington
12. Ribeiro vs. Safeway; Honolulu, Hawaii
13. Douglas vs. Brown; Spokane, Washington
14. Peterson vs. City of Spokane; Spokane Washington
15. Le vs. Rolloff Hawaii, et al.; Honolulu, Hawaii (Arbitration)
16. Decker vs. KPSS, et al.; Seattle, Washington
17. Nakai vs. Queens Medical Center; Honolulu, Hawaii (Arbitration)
18. Glaser vs. Wal-Mart; Kona, Hawaii
19. Kuby vs. Rainer Club; Seattle, Washington
20. Bube vs. Stevens Pass Ski Area; Seattle, Washington
21. Riekst vs. Special Olympics, et al.; Kennewick, Washington
22. Leffall vs. Virginia Mason Medical Center; Seattle, Washington
23. Shearer vs. City Link, et al.; Coeur d'Alene, Idaho
24. Bennett-Hanson vs. Hilton Kauai; Lihue, Kauai (Arbitration)
25. Sarian vs. Gravely; Wailuku, Maui

2104 West Riverside · Spokane, WA 99201 · (509) 624-3714 telephone/fax

26. Kennedy vs. The Juice Stop; San Diego, California
27. Van Alfen, et al. vs. Toyota; Seattle, Washington
28. Pickering vs. Meganthaler Transportation; Casper, Wyoming
29. Miller vs. Kahala Resort; Honolulu, Hawaii
30. Reiny vs. City and County Honolulu; Honolulu, Hawaii
31. Campos vs. Sack 'N Save; Kailua-Kona, Hawaii
32. White vs. 7-11; Honolulu, Hawaii
33. Paongo vs. Rosello; Honolulu, Hawaii

2011:

Trials:

1. Brehm, et al. vs. State of Hawaii; Lihue, Kauai (State)
2. Day vs. Wal-Mart; Pocatello, Idaho (State)
3. Fells, et al. vs. BNSF; Wellington, Kansas (State)
4. Weeks vs. Goodell; Spokane, Washington (State)
5. Gatewood vs. BNSF; Savannah, Missouri (State)
6. Hinton vs. Costco; Las Vegas, Nevada (State)
7. Bolyard vs. Moses Lake Jr. Miss, et al.; Ephrata, Washington (State)
8. Heeren vs. Dean; Ellensburg, Washington (State)
9. Pound vs. SAIC, et al.; Portland, Oregon (State)
10. U.S.A. vs. Thompson; Spokane, Washington (Federal)
11. Wessling vs. Marathon Equipment; Kent, Washington (State)
12. Celaya vs. Royal Kona Resort; Kona, Hawaii (State)
13. Adair vs. City of Federal Way; (State)

Depositions/Arbitrations:

1. Day vs. Wal-Mart; Pocatello, Idaho
2. Harder vs. State of Washington; Seattle, Washington
3. Ahuna-Eberhart vs. TIAA; Honolulu, Hawaii
4. Stone vs. Centennial Trail Apartments; Post Falls, Idaho
5. Herron vs. Greek Theater; Los Angeles, California
6. Bolyard vs. Moses Lake School, et al.; Moses Lake, California
7. Oldja vs. Warm Beach Christian Camp; Seattle, Washington
8. Cortez, et al. vs. United Rentals, et al.; Las Vegas, Nevada
9. Kirkland vs. Emhart Glass; Seattle, Washington
10. Mendez vs. Faith Evangelical Church, et al.; Vancouver, Washington
11. Wu, et al. vs. Campbell Estates, et al.; Honolulu, Hawaii
12. Beaver, et al. vs. Exxon, et al.; Madison, Wisconsin
13. Crapo Farms, et al. vs. Spudnik; Pocatello, Idaho
14. Pestonit v Orellana; Seattle, Washington
15. Paladino vs. CDK, et al.; Seattle, Washington
16. Riddall vs. Fred Meyer; Puyallup, Washington
17. Pagliaro vs. Tesoro; Kona, Hawaii
18. Wilson, et al. vs. GE, et al.; Seattle, Washington
19. Serena vs. TriMark; Seattle, Washington
20. Dodds vs. PSE; Seattle, Washington
21. Spies vs. Preston Homes, et al.; Moses Lake, Washington

22. Wessling vs. Marathon, et al.; Seattle, Washington
23. Sloy vs. Shops at Wailea; Wailuku, Maui
24. Ross vs. Serpico; Wailuku, Maui
25. Jennings vs. Alexander Brothers; Honolulu, Hawaii
26. Holmberg vs. PSS, et al.; Tampa Florida (Volumes 1 & 2)
27. Guerrero vs. Yost; Spokane, Washington
28. Sabado vs. Regal Transport; Bellingham, Washington
29. Rolon vs. Pete's Belly Bustaz; Hilo, Hawaii (Arbitration)
30. Richards vs. Comcast Arena; Everett, Washington
31. Roberts vs. Alaska, Logistics; Seattle, Washington
32. Bryan vs. Hawthorn Suites; Seattle, Washington
33. Munderloh vs. Avista; Spokane, Washington
34. Herz vs. Forsyth, et al.; Atlanta, Georgia (Volumes 1 & 2)
35. Hamblen vs. Starbucks; Spokane, Washington
36. Celaya vs. Royal Kona Resort, et al.; Kona, Hawaii
37. Girard vs. State of Washington, et al.; Kelso, Washington
38. Knowles vs. UPRR; Los Angeles, California
39. Shipps vs. AMSCO Windows; Salt Lake City, Utah
40. Major vs. Lep-Re-Kon Market; Moses Lake, Washington
41. Hernandez vs. Altec; West Palm Beach, Florida
42. Fogle vs. Clark County, et al.; Vancouver, Washington
43. Falck vs. Scarsella Brothers; Seattle, Washington
44. Brady vs. Wenatchee School District; Wenatchee School District
45. Perez vs. Loveland; Denver, Colorado

2010:

Trials:

1. Amos vs. WL Plastic; Salt Lake City, Utah (Federal)
 2. Ferguson vs. Safway; Everett, Washington (State)
 3. Smith vs. Muthersbaugh, et al.; Coeur d'Alene, Idaho (State)
 4. Rivera vs. Cornejo & Sons, at al.; Wichita, Kansas (State)
 5. DiViesti vs. UPRR; Pocatello, Idaho (State)
 6. Bransetter vs. J.D. Rents; Canyon City, Oregon (State)
 7. Levy vs. CRS Financial; Everett, Washington (State)
 8. Ingle vs. Montana State Fund; Kalispell, Montana (State)
- Via Preservation Deposition
9. Miller vs. Mt. Baker; Bellingham, Washington (State)
 10. Bell vs. Cummings, et al., Kalispell, Montana (State)
 11. Bell vs. Ray's Boat House; Seattle, Washington (State)
 12. Keliihanani vs. KBOS; Honolulu, Hawaii (Federal)
 13. Mungia vs. McDonald's, et al; Honolulu, Hawaii (Federal)
 14. Mobil vs. Ambyth; Hagåtña, Guam (Via Preservation Deposition)
 15. Bright vs. REI; Spokane, Washington (State)

Depositions/Arbitrations:

1. Patterson vs. Allied Machinery, et al.; Hilo, Hawaii
2. Geoca vs. Marriott; Lihue, Kauai

3. Le, et al. vs. FCI, et al. Volumes 1 & 2; San Jose, California
4. Frostad vs. R-Custom Excavation; Tacoma, Washington
5. Schlicker vs. Rantz Marine Park Development; Spokane, Washington
6. Young vs. State of Hawaii, et al. Volumes 1 & 2; Honolulu, Hawaii
7. Shiigi vs. Island Movers, et al.; Honolulu, Hawaii
8. Dallezotte vs. San Diego State University; San Diego, California
9. Smith vs. East Valley School; Spokane, Washington
10. Graves vs. Lake Wenatchee Hideaway, et al.; Leavenworth, Washington
11. Paladino vs. CDK; Seattle, Washington
12. Varnau vs. Enterprise, et al.; Seattle, Washington
13. Cook vs. RSC, et al.; Seattle, Washington
14. Hagberg vs. Canaan; Seattle, Washington
15. Bryan vs. Wailea Golf, et al; Waihuku, Maui
16. Martin vs. Shelley Electric, et al.; Wichita, Kansas
17. Scherr vs. Marriott, et al.; Chicago, Illinois
18. Alfano vs. BRP; Sacramento, California
19. Munguia vs. McDonald's; Kahului, Maui
20. Mendonca vs. Eleele Shopping Center, et al.; Lihue, Kauai
21. Bell vs. Ray's Boat House; Seattle, Washington
22. Jackson vs. U.S. Bank; Wenatchee, Washington
23. Johnson vs. U.S.A.; Honolulu, Hawaii
24. Gendler vs. State of Washington; Seattle, Washington
25. Jacobson vs. Gould Trust, et al.; Seattle, Washington
26. Karuza vs. BP, et al., Seattle, Washington
27. Donohoe vs. Best Buy; Spokane, Washington
28. Peha vs. Buno Construction; Seattle, Washington
29. Crawford vs. Prosser School District; Prosser, Washington
30. Brehm vs. State of Hawaii; Honolulu, Hawaii
31. Marvit vs. Zeisel, Volumes 1 & 2; Honolulu, Hawaii
32. Bright vs. REI; Spokane, Washington
33. Gatewood vs. BNSF; Savannah, Missouri
34. Polson vs. Affordable Crane; Seattle, Washington
35. Brown vs. SCRRA, et al.; Los Angeles, California
36. Fells vs. BNSF, et al; Wellington, Kansas
37. Thomas vs. United Rental, et al.; Seattle, Washington
38. Middleton vs. Kahn; Tacoma, Washington
39. Eutsey vs. Morbark; Pittsburg, Pennsylvania
40. Phillips vs. NDOT; Las Vegas, Nevada
41. Kress vs. State of Washington, et al.; Seattle, Washington
42. Alexander vs. Indiana Railroad; Indianapolis, Indiana
43. Zablan vs. Castle and Cook; Honolulu, Hawaii
44. Noel vs. Silverwood; Coeur d'Alene, Idaho
45. Weeks vs. Goodell; Spokane, Washington
46. Davis vs. Ben Franklin Transit; Kennewick, Washington
47. Alexander, et al. vs. Boucher; Puyallup, Washington
48. Anderson vs. Illinois Central Railroad; New Orleans, Louisiana
49. King vs. Kinitar; Seattle, Washington

2009:

Trials:

1. Smith vs. Koolau Golf Course; Honolulu, Hawaii (State)
2. Hoogestraat vs. Maui Land and Pineapple, et al.; Wailuku, Maui (State)
3. Phillips vs. Erhart; Boise, Idaho (State)
4. Pierce vs. Spokane Raceway Park; Spokane, Washington (State)
5. Portnoy vs. Metropolitan Markets; Seattle, Washington (State)
6. Seckinger vs. Riald Investment; Honolulu, Hawaii (State)
7. Kunzler vs. Staker & Parsons, et al.; Salt Lake City, Utah (State)
8. Bianchi vs. Salazar, et al.; San Jose, California (State)
9. Norton vs. John Deere, et al.; Eugene, Oregon (State)
10. Arasato vs. State of Hawaii; Honolulu, Hawaii (State)

Depositions/Arbitrations:

1. Clay vs. Seattle School District; Seattle, Washington
2. Herwig vs. Spokane County; Spokane, Washington
3. Mercer vs. DME Company, et al; St. Louis, Illinois
4. Beierle vs. Fred Meyers; Olympia, Washington
5. DiViesti vs. UPRR; Pocatello, Idaho
6. Smith vs. Muthersbaugh; Coeur d'Alene, Idaho
7. Reed, et al vs. DME Company, et al.; St Louis, Illinois
8. Pierce vs. Spokane Raceway Park, et al.; Spokane, Washington
9. Arthur vs. State of Hawaii; Honolulu, Hawaii
10. Vaughn vs. Holmes, et al.; Tacoma, Washington
11. Etue vs. Bandit, et al.; Spokane, Washington
12. Pregil vs. Lee, et al.; Honolulu, Hawaii
13. Kove vs. Smith Construction; Kona, Hawaii
14. Ong vs. Costco; Honolulu, Hawaii
15. Morris vs. Lester Company; Elkton, Maryland
16. Jiang, et al vs. King County, et al.; Seattle, Washington
17. Erwin vs. Wings Center; Boise, Idaho
18. Camicia vs. City of Mercer Island, et al.; Seattle, Washington
19. Ohmstead vs. Bishop Square; Honolulu, Hawaii
20. Cablay vs. Costco; Honolulu, Hawaii
21. DeSanto vs. Elkay; Seattle, Washington
22. Fisher vs. Larsen Automotive, et al.; Tacoma, Washington
23. Kunzler vs. Staker & Parsons, et al.; Salt Lake City, Utah
24. Purcell vs. Trumark, et al.; Spokane, Washington
25. Amos vs. WL Plastics; Salt Lake City, Utah
26. Carlin vs. Friday Harbor Inn; Seattle, Washington
27. RG, et al. vs. YMCA; Tacoma, Washington
28. Davis, et al vs. Anderson, et al.; Nampa, Idaho
29. Arasato vs. State of Hawaii, et al.; Honolulu, Hawaii
30. Larson vs. Bethel School District; Bethel, Washington
31. Streater vs. Port of Seattle; Seattle, Washington
32. Faulk vs. Clearwater Solutions; Long View, Washington

33. Piho vs. Long's; Honolulu Hawaii (Arbitration)
34. Aguirre, et al. vs. Muddy Boy's et al.; Salt Lake City, Utah
35. Miller vs. Mt. Baker Ski Area; Bellingham, Washington
36. Levy vs. CRS; Seattle, Washington
37. McGee vs. Bunn, et al.; Springfield, Illinois
38. McMacken vs. City of Seattle; Seattle, Washington
39. Woodby vs. Rytex; Moses Lake, Washington
40. Austin vs. Loyal Mechanical; Seattle, Washington
41. Ferguson vs. Safway; Snohomish, Washington
42. Robinson vs. Neutel; Salt Lake City, Utah
43. Renaud vs. McDonald's; Lihue, Hawaii
44. Rivera vs. BNSF, et al.; Wichita, Kansas
45. Aguirre, et al. vs. Muddy Boy's et al.; Salt Lake City, Utah (Volume 2)

2008:

Trials:

1. Heth vs. Montana State Fund; Helena, Montana (State)
2. Andrade vs. Flores; Hilo, Hawaii (State)
3. Ninneman vs. Columbia Stone; Portland, Oregon (State)
4. Matson vs. Oregon Arena Corporation; Portland, Oregon (State)
5. Stopp vs. City and County of Honolulu; Honolulu, Hawaii (State)
6. Taylor vs. Centioli, et al.; Seattle, Washington (State)
(Via Preservation Deposition)
7. Ilao vs. Luk; Hagåtña, Guam
(Via Preservation Deposition)
8. Cmos, et al. vs. CH2M Hill, et al.; Spokane, Washington (State)
9. Matus vs. Hood Manor Apartments, et al.; Kennewick, Washington (State)
10. Sewell vs. Viza Motors; Colville, Washington (State)
11. Figueroa vs. Food Processing Equipment Corp.; Mt. Vernon, Washington (State)
12. Ingle vs. State of Washington; Colfax, Washington (State)
13. Kim, et al. vs. State of Hawaii; Honolulu, Hawaii (State)

Depositions/Arbitrations:

1. Francis vs. UPRR, et al.; San Jose, California
2. Goins vs. Kendall, et al.; Lewiston, Idaho
3. Huffman vs. King, et al.; Boise, Idaho
4. Galante vs. Kostelecky; Honolulu, Hawaii
5. Stanton vs. Costco, et al.; Honolulu, Hawaii (Vol 2)
6. Su'u vs. Dooley, et al.; Hagåtña, Guam
7. Hoogestraate vs. Maui Land and Pineapple, et al.; Kapalua, Maui
8. Gu vs. Griswold; Seattle, Washington
9. Steele vs. Trinar, et al.; Seattle, Washington
10. Weis vs. Spri Products; Anchorage, Alaska
11. Reiner vs. Hampton Inn, et al.; Missoula, Montana
12. Fouts vs. ACHD, et al.; Boise, Idaho
13. Basso vs. Shamrock Materials; San Francisco, California
14. Gonsalas vs. Horn; Honolulu, Hawaii (Arbitration)

15. Stopp vs. City and County of Honolulu; Honolulu, Hawaii
16. Cmos, et al. vs. CH2MHill; Spokane, Washington
17. Beck vs. L & M Trucking; Coeur d'Alene, Idaho
18. Flaxman vs. Lee; Seattle, Washington
19. Williams vs. Madison County; Rexburg, Idaho
20. Stacey vs. Dillard's, et al.; Pocatello, Idaho
21. Gindlina vs. Coburn, et al.; Seattle, Washington
22. McCurdy vs. Fleetwood, et al.; Coeur d'Alene, Idaho
23. Dalgrehn vs. Silver Star Telephone; Cody, Wyoming
24. Meyer vs. Goodwill; Spokane, Washington
25. Simmonds vs. Ritewood; Pocatello, Idaho
26. Shell vs. Von Holt, et al.; Lihue, Kauai
27. Spencer vs. Denison; Colville, Washington
28. Taylor vs. Centioli; Seattle, Washington
29. Nate vs. UPRR; Pocatello, Idaho
30. Bixby vs. UPRR; Pocatello, Idaho
31. Williams vs. U.S. Bank, et al.; Clarkston, Washington
32. Jury v Wal-Mart; Kennewick, Washington
33. Brown v USA; Louisville, Kentucky
34. Mizutani vs. American Savings Bank; Honolulu, Hawaii
35. Kealoha vs. A & B Fleet Services; Kona, Hawaii
36. Holland vs. State of Washington, et al.; Seattle, Washington
37. Childs vs. Gold Tip; Boise, Idaho
38. Stewart vs. Big D Construction; Jackson Hole, Wyoming
39. Figueroa vs. FPEC; Mt. Vernon, Washington
40. Hall vs. Wingate; Missoula, Montana
41. Howell vs. Republic Parking; Boise, Idaho
42. Pinsky vs. Sands of Kahana; Kahalui, Maui
43. Ingle vs. State of Washington; Colfax, Washington
44. Phillips v Erhart; Boise, Idaho
45. Godinez vs. Windy River Winery; Kennewick, Washington
46. Smith vs. Koolau Golf Course; Honolulu, Hawaii
47. Stewart vs. Haleakala ATV, et al.; Wailuku, Maui
48. Avichouser vs. K Mart; Kahalui, Maui
49. Roush vs. Campbell County, et al.; Gillette, Wyoming
50. Bryan vs. West Wind Farms, et al.; Casper, Wyoming
51. Cooper vs. Coastal Machinery; Redding, California
52. Williams vs. Jones, et al.; Kennewick, Washington
53. Seckinger vs. Swing Video, et al.; Honolulu, Hawaii
54. Mako vs. BNSF; Tacoma, Washington

2007:

Trials:

1. Demello vs. State of Hawaii; Honolulu, Hawaii (State)
Via Preservation Deposition
2. Herbert vs. State of Hawaii; Honolulu, Hawaii (State)
Via Preservation Deposition

3. Findlay vs. Anderson Cattle Company Restaurant; Vancouver, Washington (State)
Via Preservation Deposition
4. Jones vs. State of Hawaii; Honolulu, Hawaii (State)
5. Dickman vs. Budget Rental, et al.; Spokane, Washington (State)
6. Clark vs. Sharley-Hubbard; Spokane, Washington (State)
7. Stamey et al. vs. Big Mountain Resort, et al.; Kalispell, Montana (Federal)
Via Preservation Deposition
8. Salvini vs. Ski Lifts, Inc.; Seattle, Washington (State)
9. Pearl vs. Fred Meyer Stores; Seattle, Washington (State)
10. Herbert vs. State of Hawaii; Honolulu, Hawaii (State)
11. Megison vs. GM, et al.; Santa Cruz, California (State)
12. Demello vs. State of Hawaii; Honolulu, Hawaii (State)
13. People vs. Sykes; Hagåtña, Guam
14. Sampio vs. State of Hawaii; Honolulu, Hawaii (State)
15. Mabrey vs. Wizard Fisheries; Seattle, Washington (Federal)
16. Brower vs. North Slope Borough; Barrow, Alaska (State)
17. King vs. Duck Inn; Havre, Montana (State)
18. Gonsalves vs. State of Hawaii; Honolulu, Hawaii (State)
19. Cabrera vs. State of Hawaii; Honolulu, Hawaii (State)

Depositions/Arbitrations:

1. Pearl vs. Fred Meyer Stores; Seattle, Washington
2. LeMaster et al. vs. Arrow Metal, et al.; Seattle, Washington
3. Sanders vs. Fairmont Orchid; Kona, Hawaii
4. Holler vs. Hilton; Honolulu, Hawaii
5. Tani vs. Healy Tibbits, et al.; Honolulu, Hawaii (Arbitration)
6. Perez vs. Sack N' Save; Honolulu, Hawaii
7. Sampio vs. State of Hawaii; Honolulu, Hawaii (Arbitration)
8. Peters vs. Smith Construction; Helena, Montana
9. Powell, et al. vs. City and County of Honolulu; Honolulu, Hawaii
10. Sanders vs. Fairmont Orchid; Kona, Hawaii (Volume 2)
11. Mabrey vs. Wizard Fisheries; Seattle, Washington
12. Chapman vs. Killinger; Twin Falls, Idaho
13. Tarlton vs. Ryobi et al.; Seattle, Washington
14. Waite vs. Brodhead et al.; Spokane, Washington
15. Speed vs. ICRR; New Orleans, Louisiana
16. Ladner vs. Goggin, et al.; Coeur d'Alene, Idaho
17. Teves vs. Kaiser; Honolulu, Hawaii (Arbitration)
18. Saunders vs. Fairmont Orchid; Kona, Hawaii (Arbitration)
19. Stanton vs. Costco; Honolulu, Hawaii
20. Brown vs. EMB, et al.; Seattle, Washington
21. King vs. Duck Inn; Great Falls, Montana
22. Sykes vs. Melton; Hagåtña, Guam
23. Fejeran vs. Aviation Services; Commonwealth of the Northern Mariana Islands
24. Gonsalves vs. State of Hawaii; Honolulu, Hawaii (Arbitration)
25. Bond, et al. vs. Krause Manufacturing; Seattle, Washington

26. Wulff vs. Wesmont Builders, et al.; Missoula, Montana
27. Crawford vs. City of Tieton; Tieton, Washington
28. Pang vs. Yamaha, et al.; Kona, Hawaii (Volume 2)
29. Smith vs. Friends of Hawaii; Honolulu, Hawaii
30. Ordenstein vs. Windward Community College, et al.; Honolulu, Hawaii
31. Gutner vs. Fisher Hawaii; Honolulu, Hawaii
32. Sauer vs. John Deere, et al.; Denver, Colorado
33. Bond, et al. vs. Krause Manufacturing; Seattle, Washington (Volume 2)
34. Tracy vs. Luck Enterprises; Worland, Wyoming
35. Ritter vs. Foss Marine; Seattle, Washington
36. Zwettler vs. Chapin; Twin Falls, Idaho
37. Nielson vs. Jaremko; Spokane, Washington
38. Senkler v Ochse; Spokane, Washington

Richard Thomas Gill
2104 West Riverside
Spokane, WA 99201
Phone/Fax: (509) 624-3714
Email: Rick@ACSciences.com

LICENSE:

Certified Human Factors Professional, 1994-present
By the Board of Certification In Professional Ergonomics
License Number 0526, 1994

Certified XL Tribometrist, 2002-present
By the International Safety Academy
License Number A2002-0272

EDUCATION:

University of Illinois
Ph.D. in Mechanical Engineering, 1982
Area of Specialization: Human Factors

Wright State University, 1978
M.S. In Systems Engineering
Area of Specialization: Human Factors

Massachusetts Institute of Technology
1 year Graduate Study in Electrical Engineering, 1973

Wright State University
B.S. In Systems Engineering, 1972

ACADEMIC EXPERIENCE:

Professor of Mechanical Engineering at the University of Idaho (1995-2002): Teaching responsibilities include human factors, math modeling, mechanics, and statistics. Additional responsibilities include appointment as an adjunct professor in the Department of Psychology and Director of Idaho Space Grant Consortium.

Associate Professor of Mechanical Engineering at the University of Idaho (1990-1995): Teaching responsibilities include human factors, math modeling, mechanics, and statistics. Additional responsibilities include appointment as an adjunct professor in the Department of Psychology and Director of Idaho Space Grant Consortium.

ACADEMIC EXPERIENCE: (Continued)

Assistant Dean for the College of Engineering at the University of Idaho (1989-1990): Administrative responsibilities included the overall administration of the Engineering Science curriculum, coordinating statewide off-campus programs, managing engineering cooperative education programs, and recruiting new students. Position also included teaching and research responsibilities.

Assistant Professor of Mechanical Engineering at the University of Idaho (1987-1988): This tenure track appointment was 65% Mechanical Engineering and 35% Engineering Sciences. Teaching responsibilities included math modeling, mechanics, statistics, and course development in human factors. Additional responsibilities included a position as an adjunct professor in the Department of Psychology to assist in the development of an interdisciplinary research laboratory and graduate program in human factors.

Assistant Professor of Engineering Science at the University of Idaho (1984-1987): This tenure track appointment was 50% in the Engineering Science Department and 50% in the Mathematics and Applied Statistics Department. Teaching responsibilities included courses in engineering mechanics, applied probability and statistics, and developing a course in human factors in engineering design. Additional responsibilities included helping staff the Statistical Consulting Center.

Assistant Professor of Engineering at Wright State University (1980-1984): Served as Program Director for the Human Factors Engineering Program. Teaching responsibilities included engineering statics, engineering dynamics, human factors engineering, senior seminar, and systems approach to human factors. Also held a joint appointment with the WSU School of Professional Psychology where the primary responsibility was to assist in the development of a Doctor of Psychology degree in Human Factors.

Tutor for the State of Ohio (1978): Worked as a personal tutor for individual college students being rehabilitated from mental illnesses.

Student Tutor (1969-1972): Worked as a tutor for Wright University, Dean of Students Office. Tutored courses in Mathematics and Physics.

PROFESSIONAL EXPERIENCE:

Human Factors Engineering Consultant for Applied Cognitive Sciences (1983-Present): I have been retained as an expert witness, for both the plaintiff and defense, on over 2000 legal cases nationwide, and internationally. I have been qualified as an expert in human factors engineering, accident reconstruction, mechanical engineering, safety engineering, and risk management. Work has also included contracts from U.S. government agencies (USAF Aeromedical Research Laboratory and Idaho National Engineering Laboratory) as well as private industry (Arvin Industries, The Vendo Corporation, Key Tronic Corporation, Port Townsend Paper, Hewlett Packard, Manco Industries, Fun-Kart Association, Anchor Industries, and so forth).

PROFESSIONAL EXPERIENCE: (Continued)

Research Scientist for the USAF Office of Scientific Research (1983): This was an appointment at the USAF Aeromedical Research Laboratory. The work focused on assessing the relationship between acceleration-stress and pilot workload. In addition, I also worked on a project concerning the effects of high-onset rates of acceleration on pilot performance.

Graduate Research Assistant at the University of Illinois (1978-1981): Responsibilities included the conception and formulation of various research projects in the fields of Engineering Psychology and Mechanical Engineering.

Human Factors Engineer for the United States Air Force Human Resources Laboratory (1976-1978): Worked concurrently in two major fields: (1) visual simulation and (2) motion and force simulation. This included conducting in-house research as well as serving as program manager for externally conducted research.

Electronics Engineer for the United States Air Force Foreign Technology Division (1974-1976): Position required a Top Secret security clearance. The work involved the selection and analysis of intelligence data to predict foreign military trends and capabilities.

Process Control Engineer for Industrial Nucleonics Corporation (1973-1974): Worked on the development of an Infra-red moisture gauge to allow real-time computer control for tobacco dryers. Responsibilities included the development of a calibration technique and system installation at an operational site.

Computer Operator for Synergy, Inc. (1970-1972): Operated a CDC 6600 Computer at Wright Patterson Air Force Base while attending undergraduate school.

HONORS AND AWARDS:

University of Idaho College of Engineering Outstanding Academic Advisor, 1998.

University of Idaho College of Engineering Outstanding Senior Faculty, 1996.

University of Idaho Alumni Award for Excellence, 1994.

American Society for Engineering Education Centennial Certificate Awardee, 1993.

Best Paper Award from American Society for Engineering Education Regional Conference, 1991.

ASUI Outstanding Faculty Award, 1991.

University of Idaho Alumni Award for Excellence, 1988.

HONORS AND AWARDS: (Continued)

Recipient of the New Engineering Educator Excellence Award from American Society for Engineering Education, 1987.

Recipient of the Dow Outstanding Young Faculty Award from the American Society for Engineering Education, 1986.

Selected as an S.C.E.E. fellow for the Air Force Office of Scientific Research Summer Faculty Research Program, 1983.

Graduated first in class at the University of Illinois (GPA 5.0 out of 5.0), 1981.

Recipient of the "Science and Engineering Career Motivation Award" which is given annually by the Dayton Board of Education, 1978.

Graduated first in class at Wright State University (GPA 4.0 out of 4.0), 1978.

Awarded National Science Foundation Traineeship to Massachusetts Institute of Technology, 1972.

Graduated first in class at Wright State University, summa cum laude (GPA 3.9 out of 4.0), 1972.

W.S.U. Foundation Scholarship, 1972.

Member of Tau Beta Pi National Engineering Honor Society, 1971.

W.S.U. Foundation Scholarship, 1971.

Golding Award (Outstanding Junior Engineer) at Wright State University, 1971.

PUBLICATIONS:

Gill, R., and Gordon, S. Cognitive Task Analysis. In C. Zsombok and G. Kline (Eds.), Naturalistic Decision Making, pp. 131-140, Lawrence Erlbaum Associates, 1997.

Gill, R. Towards Protection from Cumulative Trauma Disorder Litigation. Advances in Industrial Ergonomics and Safety VII, Taylor and Francis, Ltd., 1996.

Gill, R., Gordon, S., McGehee, D., and Dean, S. Integrating Cursor Control into the computer Keyboard. In Human Factors Perspectives on Human-Computer Interaction: Selections from Human Factors and Ergonomics Society Annual Meeting Proceedings, 1983-1994, Human Factors Society, 1995.

Gill, R., Gordon, S., and Babbitt, B. Embedding Intelligent Tutoring into Real Time Simulation. Proceedings of the Eighth Symposium on Aviation Psychology, 1995.

PUBLICATIONS: (Continued)

Babbitt, B., Bell, H., Crane, P., Sorensen, H., Gordon, S., and Gill, R. Intelligent Tutoring System: F-16 Flight Simulation. Proceedings of the 1994 American Institute of Aeronautics and Astronautics (AIAA) Computing in Aerospace Conference, 1994.

Gill, R. A Comprehensive Evaluation of Warning Label Design. In K. Laughery, M. Wogalter, and S. Young (Eds.), Human Factors Perspectives on Warnings, pp. 50-52, Human Factors and Ergonomics Society, 1994.

Gill, R., and Gordon, S. Conceptual Graph Analysis: A Tool for Curriculum Development, Instructional Design, and Trainee Evaluation. Proceedings of the 1993 Interservice/Industry Training Systems and Education Conference, pp. 861-870.

Gordon, S. E., Schmierer, K. A., and Gill, R. T. Conceptual Graph Analysis: Knowledge Acquisition for Instructional System Design. Human Factors, 35, pp. 459-482, 1993.

Gordon, S. E., and Gill, R.T. Knowledge Acquisition with Question Probes and Conceptual Graph Structures. In T. Lauer, E. Peacock, and A. Graesser (Eds.), Questions and Information Systems, pp. 29-46. Hillsdale, N J: Lawrence Erlbaum Associates, 1992.

Gill, R, Gordon, S., McGehee, D., and Dean, S. Integrating Cursor Control into the Computer Keyboard. Proceedings of the Human Factors Society's 35th Annual Meeting, Vol. 1, pp. 256-260, 1991.

Gill, R., Dingus, T. Human Factors and Engineering Design High School Summer Workshop. Proceedings of the Human Factors Society's 34 Annual Meeting, Vol. 1, pp. 522-524, 1990.

Dingus, T., Gordon, S., and Gill, R. A New Program for the Remote Training of Human Factors Professionals. Proceedings of the Human Factors Society's 34 Annual Meeting, Vol. 1, pp. 534-536, 1990.

Gill, R., and Stauffer, L. Developing Appropriate Evaluation Criteria for Assessing the Value Added by Mechanical Engineering Education Programs. Proceedings of the 1989 American Society for Engineering Education Annual Conference, Vol. 3, pp. 1263-1265, 1989.

Gordon, S., and Gill, R. Question Probes: A Structured Method for Eliciting Declarative Knowledge. AI Applications in Natural Resource Management, Vol. 3, pp. 13-20, 1989.

Gill, R. Mail-order Errors: The Role of Human Factors. Dickinson's PSAO, Vol. 3, No. 12, pp. 6-7, Dec. 1988.

Christensen, J., Topmiller, D. and Gill, R. Human Factors Definitions Revisited. Human Factors Bulletin, pp. 7-8, Oct. 1988.

PUBLICATIONS: (Continued)

Dingus, T., Hyde, R., Hyde, T., Frame, M. and Gill, R. The Speed and Accuracy of a Spatial Communication Task as a Function of Operator Location. Proceedings of the 21st Annual Meeting of the Human Factors Association of Canada.

Gill, R., Gordon, S., Moore, J. and Barbera, C. The Role of Knowledge Structures in Problem Solving. Proceedings of the 1988 American Society for Engineering Education Annual Conference, Vol. 2, pp. 583-90, 1988.

Junker, A., Levison, B. and Gill, R. A Systems Engineering Based Methodology for Analyzing Human Electrocortical Responses. AFAMRL Technical Report AAMRL-TR-87-030, May 1987.

Gill, R., Barbera, C. and Precht, T. A Comparative Evaluation of Warning Label Designs. Proceedings of the Human Factors Society's 31st Annual Meeting, Vol. 1, pp. 476-78, 1987.

Gordon, S., Gill, R., and Dingus, T. Designing for the User: The Role of Human Factors in Expert System Development. Artificial Intelligence Applications in Natural Resource Management, Vol. 1, No. 1, pp. 35-46, 1987.

Gill, R. The Need for Human Factors in the Design of Expert Systems. Proceedings of the 1987 Frontiers in Education Conference, 1987.

Gill, R., and Dingus, T. A Structural Approach to Teaching Relative Motion. Proceedings of the 1987 American Society for Engineering Education Annual Conference, Vol. 4, pp. 1806-08, 1987.

Barbera, C. and Gill, R. Human Factors in Warning Label Design. Proceedings of Interface 1987.

Gill, R., Kenner, K. and Junker, A. Steady State EEG as A Measure of Peripheral Light Loss. Proceedings of the Human Factors Society's 30th Annual Meeting, Vol. 2, pp. 1249-52, 1986.

Kenner, K, Junker, A. and Gill, R. Visual Evoked Response in the Periphery, The Beginnings of an Objective Measure of G-Induced PLL. Proceedings of the National Aerospace and Electronics Conference, Vol. 3, pp. 909-12, May 1986.

Gill, R., and Albery, W. The Effects of Acceleration Stress on Human Workload and Manual Control. Proceedings of the 21st Annual NASA Conference on Manual Control, 1985.

Albery, W., Ward, S. and Gill, R. Effects of Acceleration Stress on Human Workload. AFAMRL Technical Report AAMRL-TR-85-039, 1985.

PUBLICATIONS: (Continued)

Gill, R., and Gordon, S. The Effectiveness of Group Projects in Teaching Engineering Mechanics. Proceedings of the 1984 American Society for Engineering Education, 5(5), pp. 27-33, 1984.

Gill, R., Obleski, M. Gordon, S. and Albery, W. The Effects of Acceleration on Cognitive Processing. Proceedings of Mid-Central Ergonomics/Human Factors Conference, April 1984.

Gill, R. Pilot Workload and G-Stress: A Potential Interaction? USAF Summer Faculty Research Program - Final Reports. Published by Southeastern Center for Electrical Engineering Education, December 1983.

Pierce, B., Obleski, M. and Gill, R. Human Factors in Aerospace: A Student Chapter Project. Human Factors Bulletin, April 1983.

Gill, R., and Wickens, C. Operator Workload as a Function of the System State. Proceedings of the 18th Annual NASA Conference on Manual Control, 1982.

Gill, R., Wickens, C., Reid, R. and Donchin, E. Pseudo-Quickening: A New Display Technique for Manual Control of Higher Order Systems. Proceedings of the Human Factors Society's 26th Annual Meeting, 1982.

Gill, R., Wickens, C., Donchin, E. and Reid, R. The Internal Model as a Means of Analyzing Human Performance. Proceedings of the 1982 I.E.E.E. International Conference on Systems, Man and Cybernetics, 1982.

Hull, J., Gill, R. and Roscoe, S. Locus of Stimulus to Visual Accommodation: Where in the World, or Where in the Eye? Human Factors, 24, pp. 311-19, 1982.

Wickens, D., Gill, R., Kramer, A., Ross, W. and Donchin, E. The Cognitive Demands of Second Order Manual Control: Applications of the Event-Related Brain Potential. Proceedings of the 17th Annual NASA Conference on Manual Control, NASA TM, 1981.

Ritchie, M., Gill, R. and Jankowski, R. The Education and Placement of Human Factors Engineers. Proceedings of the North Central Section, American Society for Engineering Education, Dayton, OH, pp. 82-87, April 1981.

Albery, W., and Gill, R. Development and Validation of Drive Concepts for an Advanced G-Cueing System. Proceedings of the 1978 American Institute of Aeronautics and Astronautics, 1978.

PRESENTATIONS:

Gill, R., Gill, J., and Doerzaph, Z. **Systems Safety and Human Factors.** Invited Presentation to the 2nd Annual Brains, Trains, & Automobiles Conference, April 2010.

Gill, R. and Gill, J. **Safety by Design: Not Always.** Invited presentation at the 360 Advocacy Institute Conference, Sponsored by Citizens for Rail Safety, February 2009

Gill, J. and Gill, R. **Human Factors in Litigation.** Invited presentation by the Washington State Trial Lawyer's Association, October 2006.

Gill, R. **Electronic Billboards: Safety and Social Issues.** Invited presentation to the Snohomish City Council Meeting, May 2005.

Gill, R. **Human Factors in Accident Reconstruction.** Invited address to the 20th Annual Special Problems in Traffic Crash Reconstruction at IPTM, Jacksonville, Florida, April, 2002.

Gill, R. **Human Factors Expert Witness.** American Board of Trial Advocates Meeting, Waikiki, Hawaii, November 2000.

Gill, R. **Industrial Funding Support for K-12 Programs.** Panel discussant for the Annual Meeting of Space Grant Directors, April 1997.

Gill, R. **Human Factors in Forensic Investigations.** Invited address at Society of Forensic Engineers and Scientists Meeting, August 1996.

Barnes, T., Hodge, J., and Gill, R. **Design and Fabrication of an Integrated Cystic Fibrosis Treatment System.** Presented at the 1996 Idaho Academy of Science Meeting.

Gill, R. **Technology and Its Impact on Society.** Invited address at the Fourteenth Annual International Exchange Conference, Lewis-Clark State College, October 1994.

Gill, R., and Lewis, V. **Towards Improved College Teaching: A Preliminary Report.** Presented at the American Society for Engineering Education Pacific Northwest Section Annual Regional Meeting, April 1992.

Elger, D., and Gill, **Modeling the Problem Solving Process Used by an Expert.** Presented at the American Society for Engineering Education Pacific Northwest Section Annual Regional Meeting, April 1992.

Gill, R. **High School Summer Workshops: An Effective Recruitment Technique.** Presented at the American Society for Engineering Education Pacific Northwest Section Annual Regional Meeting, April 1991.

Elger, D., and Gill, R. **A Goal for Engineering Education: The Ideal Engineer.** Presented at the American Society for Engineering Education Pacific Northwest Section Annual

Regional Meeting, April 1991.

PRESENTATIONS: (Continued)

Carson, B., and Gill, R. The Human Factors Element in Engineering Design. Presented at the 1989 Idaho Academy of Science.

Simon, A., Imthurn, J., Polillo, S. and Gill, R. The Role of Human Factors in Engineering Design: A Case Study of an Industrial Paper Winder. Presented at the 1987 Idaho Academy of Science.

Gill, R. The Role of Human Factors in Operator Workstation Design. Invited Presentation at the 1986 PCAPPA.

Gill, R., and Mau, C. The Feasibility of Using EEG to Measure Peripheral Light Loss. Presented at the Annual Western Psychological Association Meeting, 1986.

Gill, R., Ward, S. and Albery, W. The Comparison of Subjective and Objective Workload Measures for Humans Under Acceleration Stress. Presented at the 1984 National Aerospace and Electronics Conference, May 1984.

Gordon, S., & Gill, R. A New Technique for Assessing Cognitive Processing Capabilities. Presented at the Annual Meeting of the Ohio Academy of Science, April 1984.

Richard, M., Rice, S. and Gill, R. The Improvement of a Ballistics Test Range Control Panel Via Human Factors Engineering. Presented at the Annual Meeting of the Ohio Academy of Science, April 1984.

Peters, R., Gill, D., Pasquini, L. and Gill, R. Human Factors Critique and Redesign of a Jet Engine Control Panel. Presented at the Annual Meeting of the Ohio Academy of Science, April 1984.

Gill, R. Improved Quickened Displays. Presented at the Annual Meeting of the Ohio Academy of Science, April 1983.

Jullen, J., Click, A., Sanders, S., Scandura, L. and Gill, R. Human Factors Critique and Design of a Hydraulic Systems Test Stand. Presented at the Annual Meeting of the Ohio Academy of Science, April 1983.

Ingle, D., Dabney, G., Scherty, K. Beckett, T. and Gill, R. A Human Factors Critique of an Industrial Sewer Cleaner. Presented at the Annual Meeting of the Ohio Academy of Science, April 1983.

Gill, R. The Role of Human Factors at Three Mile Island. Invited presentation by the Southern Ohio Chapter of the Human Factors Society, October 1982.

Gill, R. Human Factors in Education. Invited presentation by the Dayton Chapter of the I.E.E.E., October 1980.

Gill, R., Ross, T. and Albery, W. An Advanced Acceleration Simulation Device for the Flight Simulators. Presented at the Dayton-Cincinnati AIAA Mini-Symposium, 1978.

PROFESSIONAL ACTIVITIES:

Member of Human Factors and Ergonomics Society
Member of American Society for Testing and Materials
Member of System Safety Society

GRANTS AND CONTRACTS:

Testing and Evaluation of "Safe Steps Floor Treatment" on University of California Riverside campus, Co-investigator, 2010.

Slip and Fall Prevention, Comwell, dba McDonald's, Co-investigator, 2008.

Evaluation and Development of Warning Information for Portable Fire Shelters, Anchor Industries, Co-investigator, 2006.

Safety Analysis of Electronic Billboards, City of Snohomish, Principle Investigator, 2005.

Evaluation of Warning Label Designs, American Fun Kart Association, Principle Investigator 2002.

Idaho Space Grant Consortium, NASA, \$260,000, Assistant Director, 2001.

Idaho Space Grant Consortium, NASA, \$260,000, Assistant Director, 2000.

Transforming Engineering Consulting Into Engineering Case Studies, University of Idaho, \$35,000, Sabbatical, 1999-2000.

Idaho Space Grant Consortium, NASA, \$256,500, Director, 1999.

NASA Experimental Program to Stimulate Competitive Research, \$225,000, State-wide Director, 1999.

Idaho Space Grant Consortium, NASA, \$256,000, Director, 1998.

Idaho Space Grant Consortium, NASA, \$255,000, Director, 1998.

Idaho Total Engineering Challenge, Lockheed Martin Aerospace Corporation, \$5,000, Principal investigator, 1997.

Idaho Space Grant Consortium, NASA, \$255,000, Director, 1997.

Idaho Space Grant Consortium, NASA, \$230,000, Director, 1996.

Summer Institute for Engineering Educators on Curriculum Design and Implementation for Interactive Teaching/Learning, University of Idaho Office of Teaching Enhancement, \$2,500, Co-principal investigator, 1995.

Idaho Space Grant Consortium, NASA, \$230,000, Director, 1995.

GRANTS AND CONTRACTS: (Continued)

Evaluation of an F-16 Intelligent Tutoring System, Northrop Corporation, \$37,600, Co-principal investigator, 1994.

JETS Workshop, US Department of Energy, \$1,400, Co-principal Investigator, 1993

Workstation and Hand Tool Design for Disk Drive Assembly, Hewlett Packard, \$5,000, Co-principal investigator, 1993.

Analysis of a Disk Drive Arm Assembly Line Process, Hewlett Packard, \$2,000, Co-principal investigator, 1992.

Multimedia for Enhanced Undergraduate Education, University of Idaho Office of Academic Affairs and IBM, \$81,000, Co-principal investigator, 1991.

JETS Summer Workshop, US Department of Energy, \$9,000, Co-Investigator, 1991.

Analysis of a Paper Winder Safety Gate, Port Townsend Paper, \$2,500, Co-principal Investigator, 1991.

Keymouse Configuration and Design, Key Tronic Corporation, \$6,700, Co-principal investigator, 1990.

Keymouse Usability, Key Tronic Corporation, \$18,900, Co-principal investigator, 1990.

JETS Summer Workshop, US Department of Energy, \$9,000, Principal investigator, 1990.

Mapping Knowledge in Declarative and Procedural Structures, Idaho State Board of Education, \$35,000, Co-principal investigator, 1990.

JETS Summer Workshop, US Department of Energy, \$22,000, Principal Investigator, 1990.

A Program to Test and Evaluate Equipment for the Disabled, University of Idaho Research Office, \$7,000, Co-principal investigator, 1989.

Research Experience for Undergraduates, National Science Foundation, \$4,000, Co-principal investigator, 1989.

Stressor Interaction Assessment, Boeing Military Aircraft Corporation, \$21,600, Co-principal investigator, 1989.

Design and Evaluation of a Vending Machine Retrofit System, The Vendo Company, \$20,400, Principal investigator, 1988.

GRANTS AND CONTRACTS: (Continued)

A Structural Technique for Evaluating Design Tools, National Science Foundation, \$60,000, Co-author and consultant, 1988.

Formations and Use of Conceptual Structures In Problem Solving Domains, Air Force Office of Scientific Research, \$79,200, Co-principal investigator, 1988.

Software Interface Design for Asynchronous Computer Conferencing, EG&G of Idaho, \$12,800, Co-principal investigator, 1987.

Techniques for Augmenting the Communication of Spatial Information, Boeing Military Aircraft Company, \$15,000, Co-principal investigator, 1987.

Evaluation of Warning Label Effectiveness, Arvin Industries, \$1,400, principal investigator, 1986.

A Structured Approach for Developing an Effective Teaching Methodology for Problem Solving: A Case Study, American Society for Engineering Education, \$1,500, principal investigator, 1986.

The Development of an Innovative Technique for Using Personal Computers to Aid in Teaching Deaf People to Speak, University of Idaho Seed Grant, \$3,300, principal investigator, 1986.

The Development of a Steady State EEG Measure of Acceleration Induced Peripheral Light Loss, United States Air Force Aerospace Medical Research Laboratory, Human Engineering Division, \$7,100, principal investigator, 1985.

The Feasibility of Using Electroencephalograms to Measure Acceleration Stress, United States Air Force Aerospace Medical Research Laboratory, Human Engineering Division, \$14,000, principal investigator, 1984.

The Effects of Acceleration Stress on Cognitive Workload, United States Air Force Aerospace Medical Research Laboratory, Biomechanics Division, \$35,000, principal investigator, 1984.

Appendix B

1
2 JUL 22 2014
3
4
5
6
7

8 IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON
9 IN AND FOR THE COUNTY OF SPOKANE

10 RAYMOND COOK and ARLENE COOK,
11 husband and wife and the marital community
12 comprised thereof,

13 Plaintiffs,

14 vs.

15 TARBERT LOGGING, INC., a Washington
16 Corporation, and SHANE BEAN and JANE
17 DO BEAN, husband and wife and the marital
18 community comprised thereof, STEVENS
19 COUNTY, a local governmental entity,

20 Defendants.

No. 10-2-05353-5

COA DIVISION III No. 32006

DEFENDANT STEVENS COUNTY'S
DESIGNATION OF SUPPLEMENTAL
CLERK'S PAPERS

21 Defendant Stevens County hereby designates the following supplemental clerk's papers
22 attached hereto pursuant to RAP 9.6 and Commissioner Joyce McCown's June 26, 2014 ruling
23 granting Respondent's Motion to Supplement the Record and Include Additional Evidence on
24 Review:

25

Document #	Document Name	Date
Trial Exhibit P1-021	Photograph of the Scene	7/19/2013
Trial Exhibit P4-044	Photograph of Roadway	7/19/2013
Trial Exhibit P4-046	Photograph of Roadway	7/19/2013

26
27
28
29
30 DEFENDANT STEVENS COUNTY'S DESIGNATION OF
SUPPLEMENTAL CLERK'S PAPERS - page 1

Evans, Cramon & Lackie, P.S.
818 W. Riverside, Suite 250
Spokane, WA 99201-0910
(509) 455-5200; fax (509) 455-3632

1	Trial Exhibit D-215-046	Photograph - Accident Scene Marked by Dale Keep During Deposition	7/19/2013
2			
3	Trial Exhibit D-220	John Hunter's Curriculum Vitae	7/19/2013
4	Trial Exhibit D-221	Wilfred Nixon's Curriculum Vitae	7/19/2013
5			
6	Trial Exhibit D-223	Photograph - Accident Scene - Marked by Richard Gill - Page 3	7/19/2013
7			

8
9 Dated this 22nd day of July, 2014.

10
11 EVANS, CRAVEN & LACKIE, P.S.

12
13
14 By 

MICHAEL E. McFARLAND, JR., #23000
Attorneys for Defendant Stevens County

15
16
17
18
19
20
21
22
23
24
25
26
27
28
29 DEFENDANT STEVENS COUNTY'S DESIGNATION OF
30 SUPPLEMENTAL CLERK'S PAPERS - page 2

Evans, Craven & Lackie, P.S.
818 W. Riverside, Suite 250
Spokane, WA 99201-0910
(509) 455-5200; fax (509) 455-3632

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

CERTIFICATE OF SERVICE

Pursuant to RCW 9A.72.085, the undersigned hereby certifies under penalty of perjury under the laws of the state of Washington, that on the 22 day of July, 2014, the foregoing was delivered to the following persons in manner indicated:

F. Dayle Andersen	Via Regular Mail	<input checked="" type="checkbox"/>
Ken Kato	Via Certified Mail	<input type="checkbox"/>
1020 N. Washington	Via Overnight Mail	<input type="checkbox"/>
Spokane, WA 99201	Via Facsimile	<input type="checkbox"/>
	Hand Delivered	<input type="checkbox"/>
Stephanie Bloomfield	Via Regular Mail	<input checked="" type="checkbox"/>
Gordon Thomas Honewell PLLC	Via Certified Mail	<input type="checkbox"/>
1201 Pacific Avenue, Suite 2100	Via Overnight Mail	<input type="checkbox"/>
Tacoma, WA 98402	Via Facsimile	<input type="checkbox"/>
	Hand Delivered	<input type="checkbox"/>









DEFENDANT'S
EXHIBIT
H 5
K 0 12

2011/05/22 09:49

Resume

John E. Hunter
Investigative Training Service, LLC
P. O. Box 1724
Woodinville, Wa. 98072
Telephone: (425) 788-7590
(Seattle Number: (206) 466-2047)
FAX: (206) 374-2456
Email: hunterits@comcast.net

LAW ENFORCEMENT EXPERIENCE:

- 25 years of service with the WASHINGTON STATE PATROL.
- 14 years working in the field of law enforcement assigned to Traffic Law Enforcement.
- 7 ½ years of service working as a detective assigned to the Investigative Services Bureau. Fatality investigation specialist.
- 3 ½ years of service as a Detective/Sergeant in-charge of the Major Accident Investigation Team (M.A.I.T.)

RELATED TRAINING:

- 15 weeks basic training at the State Patrol Academy.
- 80 hours of Basic Accident Investigation.
- 40 hours of in-service training. (Annually)
- 80 hours of criminal investigation training - Bellevue P.D.
- 80 hours of Advanced Accident Investigation - WSP Academy
- 40 hours of Truck Accident Investigation training. - WSP Academy
- 80 hours of Technical Accident Investigation training. WSP Academy
- 80 hours Accident Reconstruction - Northwestern University Traffic Institute
- 24 hours of Forensic Techniques in Death Investigation - CJTC
- 24 hours of Basic Detective Training. - WSP Academy
- 8 hours of Theory on Conservation of Linear Momentum Seminar - WATAI
- 20 hours of Interview and Interrogation Techniques - FBI at WSP Academy
- 40 hours of Homicide Investigation - WSP
- Monthly meetings Collision Analysis/Body Damage - King County M. E. Office
- 40 hours ANACAPA Criminal Analysis training - WSP
- Certified Marijuana Leaf Identification expert - WSP Crime Lab
- Trained in radar techniques.
- Trained in breathalyzer/infrared breath testing.
- Trained in pursuit driving techniques.

- Anti-lock brake testing seminar - W.A.T.A.I. 1985
- Air timing and braking systems seminar - W.A.T.A.I.
- Brake system and balance seminar - Midland Corporation
- Anti-lock/front wheel drive testing seminar - W.A.T.A.I. 1986
- Studded tire testing seminar - W.A.T.A.I. 1985
- 40 hours Microcomputer Application Programs for Traffic Accident Reconstruction - N.W. Traffic Institute
- 6 Hours Narcotic Trafficker Identification
- 80 Hours of Advanced Homicide Investigation - C.J.T.C.
- 20 Hours Car/Pedestrian Seminar - W.A.T.A.I.
- 8 Hours Motorcycle Dynamics - W.A.T.A.I.
- Tire Friction Test Seminar - W.A.T.A.I.
- Human Factors Seminar - W.A.T.A.I.
- Attend 1988 SAE "State of the Art Accident Reconstruction" - International Congress.
- Truck Dynamic Seminar - W.A.T.A.I. 1988
- Yearly Accident In-Service Training - WSP Academy
- Lateral Wind Shift of Mini Vans Test Seminar - W.A.T.A.I.
- Traffic Accident Analysis & Reconstruction Course - George Washington University School of Engineering
- Heavy Vehicle Braking Systems - Bendix Factory Training - 40 Hours
- 1989 W.A.T.A.I./ S.O.A.R. Conference - Seattle, Wa. (Trucks, Car/Pedestrian, Car/Bicycle, Seat Belts)
- National Safety Council - International Forum El Paso, Texas (Guest Speaker)
- Eaton/Fuller Transmission/Axle & Brake Systems Factory Training - Hayward, California - 36 Hours
- Washington Motorcycle Safety Foundation Course - 20 Hours
- Washington State Patrol Motorcycle Operator's Course - 80 Hours - WSP Academy
- National Transportation Safety Board - Crush Energy Analysis
- Motorcycle In-Service & Re-Certification - 16 Hours
- Death Investigation Seminar - U of W School of Medicine/Medical Examiner's Office (Guest Speaker)
- W.A.T.A.I. - Truck Accident Investigation Seminar - Portland, Oregon
- T.A.A.R - S.O.A.R. - W.A.T.A.I. Conference/Crash Tests - Texas A & M University.
- SAE Future Transportation Technology Conference - San Diego, Ca. August 13-16, 1990.
- WATAI Conference - Oct. 1990; Physics, Total Station Survey, G-Analysis & Motorcycle Deceleration
- SAE International Congress - Accident Reconstruction February 1991
- Law Enforcement & Engineering Conference - February 1991
- Michelin Tire and Vehicle Dynamics Course - Nevada Automotive Test Center - May 1991
- WATAI Conference - Oct. 1991; ABS testing & 4-Wheel Steer Testing
- 1992 Accident Reconstruction Seminar - WDTL - Helmets;

- Motorcycle Injury; Truck Collisions; Low Speed Impacts; Bicycle Collision Reconstruction; Icy Roadways
- Forensic Physics Applied to Accident Reconstruction - Colorado School of Mines. August 1992.
- WATAI Seminar - Critical Speed Tire Marks, Tacoma - October 1992
- 1993 SAE Accident Reconstruction Technology Conference, Detroit, MI. - March 1993
- ABS Presentation & Discussion Session, Detroit, MI.
- Accident Reconstruction In-Service; Energy Analysis; Drag Factors; Heavy Truck Braking; ABS - May 1993
- Commercial Vehicle Accident Investigation & Reconstruction - Arkansas State University June 1993 (40 Hours)
- 1993 WATAI/SOAR/TAAR Combined Seminar - Perception/Reaction & Night Vision; Collision Fraud Investigation; Snow & Ice Friction Values; Truck Braking & Inspection August, 1993
- Advanced Accident Reconstruction - Texas A&M - 40 Hours - August 1993
- W.A.T.A.I. Seminar - Critical Speed & Lane Change Analysis - October 1993
- W.A.T.A.I. Seminar - Expert Testimony/Video Production Tool/Critical Speed Data May, 1994
- Total Station (SDR) training & certification. WSP Academy June 1994
- Rail/Highway Collision Investigation - Burlington Northern July 1994 - 24 Hours
- 1994 In-Service Training and Certification - Car/Ped; Brake Fluid; Insurance Fraud
- 1995 SAE International Congress - February 27 - March 2, 1995 - Accident Reconstruction Session
- Northwestern University Traffic Accident Reconstruction 2 Course - April 1995 40 hours
- D.O.T. Signal Light Timing training - May 1995 - 3 hours
- Northwestern University Microcomputer-assisted Traffic Accident Reconstruction May 1995 - 40 hours
- Northwestern University Simulation Training - EDSMAC - May 1995 - 24 hours
- Pedestrian/Bicyclist Accident Investigation - Texas A&M University - August 1995 40 hours
- Tire Forensic Training - Michelin Tire - December 1995 - 8 Hours
- 1996 SAE International Congress - Accident Reconstruction Technology & Animation VI February 26~29, 1996
- W.A.T.A.I. May Seminar - Brake Fluid Study; Expert testimony - 5/96
- 1996 Combined W.A.T.A.I./S.O.A.R./T.A.A.R.S. Conference July, 1996 - ABS Truck Brakes; Fatigue; PACCAR Research.
- PC-Crash training course - University of British Columbia - August 1996.
- 1996 Accident In-Service - WSP Academy - Re-certification - 9/96
- Drowsy Driving Conference - Skamania - Nov. 21~22, 1996
- W.A.T.A.I. Spring Conference - May 14, 1997 - Hydraulic Brakes & Critical Speed
- Texas A & M Motorcycle Collision Reconstruction - May 19~23, 1997
- FARO Conference - Truck Rollover & Examination - July 25~26, 1997
- Georgia State Patrol - Motorcycle Collision Reconstruction - August 4~8, 1997.

- High Speed & Low Speed Impact Seminar - PCCRASH Training - August 18~22, 1997.
- Bio-Mechanics and Injury Causation - FARO Conference January 20, 1998.
- SAE International Congress - Detroit, MI - February 23~26, 1998.
- SOAR - WATAI - TAARS Conference - Colorado Springs, Co. - Vehicle Fires; Visibility Issues; Motorcycle Collisions; Injury Biomechanics in Low-Speed Collisions. August 28-30, 1998.
- WATAI Conference - Bremerton, Washington - Crash test; Lane change testing - October 7 & 8th, 1998.
- Motorcycle Maintenance Course - Lake Washington Technical College Sept 30~ Nov 18, 1998.
- TAARS Conference - Houston, Texas - GM 2nd Generation Airbag & Seat belt Technology, Hydraulic Brake Components & Inspection - January 22~23, 1999.
- 1999 SAE International Congress - Detroit, MI. - March 1~3, 1999. (SP-1407).
- 1999 FARO Conference - Eugene, Or. - April 1st, 1999 - Offset Frontal Impacts; Air Bag deployment; E.C.M.'s Data Collection; Low Speed Impact Forces. (8 Hours)
- W.A.T.A.I. Conference May 12, 1999 - Crash test results; Lane Change test results; Total Station; Photography & Animation; Low Speed Impacts.
- FARO Conference July 14~17, 1999 - Redmond, Or. - Crash tests (2 Car & Pole Crashes); Energy analysis; Crush Coefficients & Photographic Documentation.
- Texas A & M - Analysis of Low Speed Collisions - 40 hours - CJTC August 23~27, 1999.
- WATAI Conference - Seattle, Washington - High Rise vehicle collision investigation - Measuring C.G Height - Deceleration test of altered vehicles. 10/13~14, 1999.
- SAE World Congress - Detroit, Michigan - March 6~10, 2000.
- W.A.T.A.I. May 2000 Conference; Traffic Signal Timing, Sun Positioning, Vetronic Acquisition Equipment.
- Occupant Kinematics Conference - CIREN (Crash Injury Research & Engineering Network)- CJTC - June 7th & 8th, 2000.
- FARO Conference July 7, 2000 - Eugene Oregon - Photogrammetry - PhotoModeler Training; Vetronics - Reading Airbag Modules.
- WREX 2000 International Conference - College Station, Texas - September 25~29, 2000 Truck testing, Motorcycle testing, Tire friction testing, Staged car crashes, Traffic Signal Timing, etc.
- W.A.T.A.I. Conference - Bremerton - October 11th & 12th, 2000 - Skid testing and coefficient of friction seminar.
- WATAI Conference - CJTC - Newtonian Law - Truck Rollovers - Prof. Frank Navin May 9, 2001.
- SAE - Accident Reconstruction TOPTEC - Tempe, Arizona: Pedestrian Collision, Motorcycle Collisions, Truck Collisions, Simulation Models; Offset/Underride/override Collisions, Restraint Systems, Human Factors, Crash Data Recorders, Tire Disablement & Uncertainty Analysis - May 22~23, 2001.
- PCCrash Advanced Training Seminar - University of British Columbia - August 30~31, 2001.

- W.A.T.A.I. Conference – Human Factor Seminar – Data Retrieval Session – Bremerton. Washington – October 2001.
- Truck ABS deceleration testing – Phoenix Arizona – March, 2002.
- Crash Data Retrieval (CDR) System Operator – 2 Days – CJTC – May 9 & 10, 2002.
- F.A.R.O. Crashfest 2002 conference – July 25, 26 & 27, 2002 . Four test crashes – Vaults & 2 Car Crashes; Evidence Photography & Cad usage.
- Photomodeler Workshop – Seattle Police Department – April 12 & 13, 2003.
- Western Oregon University / Oregon State Police – Car Pedestrian and CDR Training – April 14~15, 2003.
- W.A.T.A.I. Seminar – Courtroom Reconstruction Testimony – Visual Statement Software – Photogrammetry Solutions and I-Witness software. May 22, 2003.
- W.A.T.A.I. Seminar – Metro Bus; Driver’s issues and training; Braking Systems; Field-testing – Metro Training Center – Tukwila. October 8 & 9, 2003.
- Crash Zone Training – Basic & Advanced – January 9 & 10, 2004; Beaverton, Oregon.
- Digital Photograph Course - Nikon D100 and Photoshop CS training– April 11~14th, 2004.
- W.A.T.A.I. Conference – Car/Pedestrian Collisions; Log Book Violations; Excel Spreadsheet Usage; Crush Energy Balanced Forces Calculation – May 13 & 14, 2004.
- FARO Conference – Hillsboro, Oregon – Formulas & Reconstruction Overview – July 22 & 23, 2004.
- Using Microsoft Excel in Accident Reconstruction – Sept 13~17th, 2004; Greg Russell instructing.
- W.A.T.A.I. Fall Conference 2004 – Oversized Vehicle Dynamics; Formula and Momentum and Energy Equation Review.
- Engineering Dynamics HVE training session – March 3rd & 4th, 2005.
- Engineering Dynamics HVE 2006 Forum Workshop February 20~24, 2006.
- 2006 SAE International Congress – Detroit, Michigan – April 4~5, 2006.
- WATAI Fall Conference – Staged Car Crashes; Scene Documentation & Vender Presentations – October 11 & 12th, 2006.
- Engineering Dynamics 2007 HVE Forum – San Antonio, Texas –Advanced HVE-2d training - February 26~28th, 2007. (24 hours)
- DCS Training – iWitness Software and Photogrammetry – March 6~9, 2007 Redmond, Washington. (28 hours)
- W.A.T.A.I. Spring Conference – Physics Applications to Collision Analysis – Bruno Schmidt guest speaker – May 9, 2007.
- W.A.T.A.I. Fall Conference – Critical Speed Analysis, Coefficient of Friction Testing, Comparison of Deceleration Measuring Devices – Wade Bartlett guest speaker – October 10 & 11, 2007.
- Bosch Approved Crash Data Retrieval Technician Course (CDR) – 8 Hours November 5, 2007.
- Bosch Approved 32 hour Crash Data Retrieval (CDR) Data Analyst Course w/ CDR System Operator Certificate – November 6~9, 2007.
- Engineering Dynamics 2008 HVE Forum workshop – San Diego, California – Advanced HVE 2d Training - February 18 ~ 22, 2008.
- Bosch approved Crash Data Retrieval (CDR) Technician Course – 8 hours - September 22, 2008.

- Bosch approved Crash Data Retrieval (CDR) Data Analyst Course – CDR System Operator Certification – 32 hours – September 23~26, 2008.
- FARO Fall Conference – EMC Download; Motorcycle Reconstruction ; CDR Analysis – Hillsboro, Oregon – October 23, 2008.
- WATAI Crash Conference - Staged Crash Testing - Puyallup, Washington - October 26, 2009.
- iWitness Photogrammetric Training - Kent Police Department January 25 & 26, 2010.
- 2010 HVE Forum - Advanced HVE Simulation model - SIMON model & Dymesh Collision Algorithm - HVE Brake Designer - San Antonio, Texas - March 1 ~ 5, 2010.
- Advanced Street Skill Motorcycle Training - Puget Sound Safety - June 18, 2010 - 8 hours.
- 2011 HVE Forum - Advanced HVE Simulation Model - DyMesh - Damage Studio - HVE Brake Designer, etc. - Scottsdale, Az. February 21~25, 2011.
- 2011 WATAI Spring Conference - Pole Impact Analysis - Low Speed Collisions & Fraud - May 11, 2011
- 2012 HVE Conference - New Orleans, La. - Advanced HVE work shop - Using Damage Studio - February 27~29th, 2012.
- W.A.T.A.I. Fall Conference - Damage Energy Analysis Review - Bellevue, Wa. - October 18, 2012.

TEACHING EXPERIENCE:

- Develop and implement training programs for police personnel.
- Develop and implement training programs for private sector companies.
- Conduct decentralized training for police personnel.
- Evidence handling techniques.
- Crime scene photography.
- Conduct collision prevention seminars for private corporations.
- Guest instructor Bellevue Community College - Forensic Death Investigation
- Guest instructor Green River Community College - Collision Analysis for Physics/Engineering class.
- Guest instructor Washington State Patrol Academy - Advanced, Technical & Reconstruction Accident Investigation Courses.
- Certified instructor for the Washington State Patrol Academy
- Conduct training for the Fatal Accident Review Team - Washington State Traffic Safety Commission.
- Conduct training for Accident In-Service
- Certified Accident Investigator by WSP
- Guest Speaker University of Washington - 1990 Forensic Death Investigator's Conference
- Present SAE paper #901525 - August 1990
- Guest Speaker W.A.T.A.I. October 1990
- Guest Speaker Law Enforcement & Engineering Conference - February 1991
- Guest Speaker on Vehicle Dynamics & Collision Investigation; IMEAC Conference, Coeur d'Alene, Idaho - December 1992
- Guest Speaker WDTL 1992 Accident Reconstruction Seminar

- Present SAE paper #930896 - March 1993
- Guest Speaker WSTLA Conference - April 1993
- Guest Speaker WATAI/SOAR/TAAR Conference - August 1993
- Instruct Truck Accident Reconstruction - Oregon State Police Academy 3/94
- Instruct Truck Accident Reconstruction Course - Arkansas State University (ASU) - June 1994
- Instruct 1994 Accident In-Service - WSP Academy - Hydraulic Systems
- Instruct Crush Energy Analysis - Oregon State Police - October 1994 - 40 Hours
- Guest Speaker 1994 IMEAC Conference - Coeur d'Alene, Idaho
- Co-author paper on Critical Speed Evaluation - February 1995
- Instruct Truck Accident Reconstruction Course - Arkansas State University (ASU) June 1995
- Instruct Truck Accident Reconstruction - State Traffic Safety Commission - October 1995
- Training of WSP CVEO's on Truck Accident Investigation - Dec & January, 1996
- Truck Brake Maintenance Technical Training - Carlisle Corp. 2/7/96
- Washington Association of Technical Accident Investigator's Seminar May, 1996
Brake Fluid Failure/Expert Witnesses.
- Instruct Truck Accident Reconstruction Course - Arkansas State University (ASU) June 1996
- Instruct 1996 Accident In Service - WSP Academy - 16 Hours. Re-certification
September 1996
- Association of State Criminal Investigative Agencies Conference - Speaker 11/96
- Drowsy Driving Conference - Traffic Safety Commission - Speaker November 1996
- Guest Speaker 1996 IMEAC Conference - December - Coeur d'Alene, Idaho.
- Co-author SAE paper "Developing a Crush Profile Estimate by Balancing Impact Forces #970942 - Feb./97.
- Co-author report on Hydraulic Brake Fluid Testing - April/97.
- Presentation to W.A.T.A.I. on Hydraulic Brake Fluid Tests May 14, 1997
- Texas A & M Motorcycle Collision Reconstruction May 19~23, 1997
- WSTTC Collision Investigation Course - Pt. Angeles - July 1~2,1997
- WSTTC Collision Investigation Course - Spokane - July 21~22,1997
- Georgia State Patrol - Motorcycle Collision Reconstruction - August 4~8, 1997
- California Highway Patrol - Motorcycle Collision Reconstruction - San Diego - Oct. 13~17, 1997.
- Truck Collision Reconstruction refresher - Criminal Justice Training Center - Dec 1~3, 1997.
- Author SAE paper "Brake Fluid Vaporization as a Contributing Factor in Motor Vehicle Collisions" #980371 - February 1998.
- Guest Speaker - WSTLA Conference - April 1998 - Seattle Convention Center.
- State College - Pennsylvania - Commercial Vehicle Reconstruction Course - May 4~8, 1998.
- Mesquite, Texas - Texas A&M - Motorcycle Collision Reconstruction Course - May 18~22, 1998.
- W.A.T.A.I. Conference - Lane Change Calculations and Test Data Results. May 12, 1999.

- Truck Collision Reconstruction Course - 40 Hours - Clackamas, Oregon November 1~5, 1999.
- Collision Reconstruction Course - Washington State Patrol Academy - June 2000.
- FARO Energy Analysis Conference – Salem Oregon – March 23, 2001
- Basic Collision Investigation Course – Wenatchee National Forest Personnel – April 9th & 10th, 2001.
- Truck Collision Investigation – Washington County Risk Pool – April 17~19th, 2001 – Wenatchee.
- Motorcycle Reconstruction Course – 8 Hours – Spokane County Training Center; Spokane P. D. Spokane S.O & Washington State Patrol. May 18, 2001.
- Collision Reconstruction Course – Washington State Patrol Academy – June 2001.
- Energy Analysis Conference - 8 hour course – Spokane County Training Center – September 21, 2001.
- Technical Training: Everett P.D. & WSP TID – 8 hours Everett P.D. training center, scene documentation and impact analysis, October, 2001
- Energy Analysis Seminar – April 1 & 2nd, 2002 – Kitsap County S.O. and WSP personnel.
- Motorcycle Collision Reconstruction Course – Auckland, New Zealand – June 24~28, 2002 – New Zealand Police.
- Motorcycle Collision Reconstruction Course – Wellington, New Zealand – July 1~5, 2002 – New Zealand Police.
- Heavy Truck Collision Reconstruction Course – Santa Rosa California – October 14~18, 2002.
- Heavy Truck Collision Reconstruction Course – Washington State Patrol Academy – October 21~25, 2002.
- University of Washington Private Investigation Program – 3 hours on Basic Collision Investigation – April 8, 2003 – Seattle.
- Oregon State Police Academy – Motorcycle Reconstruction – Truck Brake Calculations April 15~18th, 2003 – Western Oregon University – Monmouth, Oregon.
- Washington State Patrol Academy – Reconstruction School – Coefficient of Friction Class – June 12, 2003
- Washington State Patrol Academy – Staged Car Crash and Motorcycle Crash; Energy Analysis Class – June 16 & 17, 2003.
- Washington State Patrol Academy – Motorcycle Collision Reconstruction – June 25, 2003.
- Lake Washington School District #414 – 4 hour Basic Collision Seminar – August 15, 2003.
- Crush Energy Class – Bellevue Police Department – 7 Hours – May 12, 2004.
- FARO Conference – Formulas review, Momentum & Energy Analysis & Reconstruction Overview – July 22 & 23, 2004.
- W.A.T.A.I. Conference – Momentum, Energy Equation & Collision Evaluation - October 28, 2004.
- Momentum, Energy Analysis Class – Clallam County Sheriff's Office – March 24~25, 2005.
- Collision Evaluation and Analysis Training – WSTIP Conference – March 30th, 2005.
- Crash Analysis and Heavy Truck Training – WACVEO – Leavenworth – June 7, 2005.

- Heavy Truck Collision reconstruction Course – Oregon State Police – Astoria, Ore. August 22 ~ 26, 2005.
- Motorcycle Collision Reconstruction Course – Washington State Patrol – Shelton, Wa. – April 24~28, 2006.
- Crash Analysis Training – Klickitat County Public Works – Goldendale – May 8, 2006.
- Accident Reconstruction Instruction – Spokane Police Training Center – Accident Reconstruction Course – CJTC sponsored – August 2, 2006.
- Crash Analysis Training – Photogrammetry Training – Tacoma Fire Department – September 7, 2006.
- Collision Evaluations and Analysis – Tacoma Police Traffic Unit – 6 Hours Training Session – September 20, 2006.
- Collision Analysis Training – 44th Annual Road Conference – Spokane, Washington - October 4, 2006.
- Collision Analysis Training – 44th Annual Road Conference – Sea-Tac, Washington – December 6, 2006.
- Guest Speaker at the Truck Litigation and D.O.T. Regulations in Washington Conference – Seattle, Washington March 30, 2007
- Washington State Patrol Tech/Recon Workshop training – Everett, Washington April 20, 2007.
- University of Washington Private Investigator's Course – Collision Analysis Training – April 8, 2008.
- Washington State Patrol Motorcycle Crash Analysis Training – Bothell, Washington - May 6, 2008.
- Washington State Patrol Motorcycle Crash Analysis Training – Bremerton, Washington – June 20, 2008.
- FARO Conference – Motorcycle Collision Analysis; CDR Reconstruction Analysis – Hillsboro, Oregon - October 23, 2008.
- WSCJTC Collision Reconstruction Course - Instruction given on use of assorted equations and motorcycle collision analysis - Spokane County Sheriff's Office - March 19, 2009.
- University of Washington Private Investigator's Course - Collision Analysis Training - April 14, 2009.
- Washington State Patrol - Collision Analysis/Reconstruction Analysis of Difficult Collisions - Moses Lake, Washington - October 2, 2009.
- iWitness Photogrammetry Training - Kent Police/Fire Training Center - January 25, & 26, 2010.
- Washington State Patrol - HVE CSI training - Marysville CID - November 16, 2010.
- University of Washington Private Investigator's Course – Collision Analysis Training – April 5, 2011.
- Washington State Patrol CID - Crush Analysis Class - September 26~28, 2011 - Moses Lake, Wa.
- Accident Reconstruction Training - Washington State Patrol Academy - October, 2011.
- Collision Scene Photography Webinar - WSTIP - Olympia - October 17, 2012.

GENERAL:

- “Distinguished Service Award” - Chief George Tellevik - 1985
- Regular member of Washington Association of Technical Accident Investigators.
- Past President of W.A.T.A.I. (1988-1990)
- Past member of Society of Accident Reconstructionists.
- Past Secretary and past Secretary/Treasurer of W.A.T.A.I.
- Member of the Society of Automotive Engineers.
- Graduate of the University of Washington.
- Qualified as an expert witness in District, Superior & Federal Court.
- Past member of the Fatal Collision Research Team - Washington Traffic Safety Commission.
- Investigated over 2,000 on-scene collisions.
- Past member of the Certification Team for WSP Accident Investigators.
- Certified Accident Investigator by the Washington State Patrol.
- Certified as a Traffic Accident Reconstructionist by ACTAR - #48 Exp. 9/21/2012
- Retired Detective/Sergeant in charge of the WSP Major Accident Investigation Team. (M.A.I.T.)
- Certified by the Washington State Patrol - Exp 11/2/96.
- Certified as a Total Station Operator.
- Charter Member of Professional Society of Forensic Mapping. (11/95)
- Appointed to a National Advisory Committee on Commercial Vehicle Collision Investigation & Training. (11/95).
- Past member of the SAE paper review committee of the SAE International Congress.
- Declared an honorary Transportation Engineer by the Washington State Department of Transportation. (April 1997)
- Past - Member of Forensic Accident Reconstructionists of Oregon (FARO)
- “Outstanding Public Service Award” May 5, 1997 by Governor Gary Locke, Auditor Brian Sonntag & Chief Annette Sandberg.

Wilfrid A. Nixon, Ph. D., P. E.
Professor of Civil and Environmental Engineering
University of Iowa, Iowa City, IA 52242

AREAS OF RESEARCH:

Winter Highway Maintenance, ice removal from roads, managing information flows for decision making in maintenance operations, impacts of technological advances upon society.

EDUCATION:

B.A. (Engineering) First Class Honours, Cambridge University, June 1981
Ph.D. Engineering, Cambridge University, January 1985
Thesis Title "Some Aspects of the Engineering Properties of Ice"

PROFESSIONAL RECORD:

1998 - present Professor, Department of Civil and Environmental Engineering, University of Iowa, Iowa City, IA 52242
2002 - 2005 Director, Center for Teaching, University of Iowa, Iowa City, IA 52242
2000 - 2001 Interim Departmental Executive Officer, Department of Industrial Engineering, University of Iowa, Iowa City, IA 52242
1989-present Research Engineer, Iowa Institute of Hydraulic Research, University of Iowa, Iowa City, IA 52242
1993 - 1998 Associate Professor, Department of Civil and Environmental Engineering, University of Iowa, Iowa City, IA 52242
1989 - 1993 Assistant Professor, Department of Civil and Environmental Engineering, University of Iowa, Iowa City, IA 52242
1987 - 1989 Postdoctoral Associate, Iowa Institute of Hydraulic Research, University of Iowa, Iowa City, IA 52242
1985 - 1987 Visiting Assistant Professor, Thayer School of Engineering, Dartmouth College, Hanover NH 03755
1984 - 1985 Postdoctoral Research Fellow, Thayer School of Engineering, Dartmouth College, Hanover NH 03755

PROFESSIONAL REGISTRATION:

Registered as a Professional Engineer (P.E.) in the State of Iowa

SERVICE ACTIVITIES (only activities from 2000 on are listed, in the interest of brevity):

University Service:

2006 ongoing Member, Judicial Commission
2005 - 2007 Member, Ad Hoc Smoking Policy Review Committee
2004 ongoing Member, International Programs Executive Committee
2004 - 2007 Member, Study Abroad Advisory Committee
2001 - 2002 Chair, Provost's Review Committee for Audiovisual and Video Centers
2001 - 2004 Member, Faculty Welfare Committee
2000 - 2003 Member, Board of Directors, Student Publications Incorporated
1999 - 2000 Member, Provost's Collaboratory Majors Committee
1999 - 2000 Member, Provost's Distance Ed./Continuing Ed. Review Committee
2000 - 2001 Chair, Study Abroad Scholarship Committee
1999 - 2002 Member, Faculty Senate
1998 - 2001 Member, Study Abroad Scholarship Committee

Research Related Service:

2011 ongoing Lifeboat Foundation Engineering Scientific Advisory Board Member
2008 – 2014 Chair of TRB Committee AH010 Surface Weather and Transportation
2005 – 2008 Chair of TRB Task Force AH010T Surface Weather and Transportation
2004 ongoing Member of TRB AH000 Operations and Maintenance Group
2004 – 2010 Member of TRB AHD65 Winter Maintenance Committee
1998 – 2004 Chair of TRB A3C09 (Now AHD65) Winter Maintenance Committee
1999 ongoing Member of AASHTO Winter Maintenance Policy Coordinating Committee (WMPCC)
2002 ongoing Member of the Executive Committee of SIRWEC, the Standing International Road Weather Conference
2003 – 2004 Co-Chair, 6th TRB/NRC Symposium on Snow Removal and Ice Control Technology
2002 Member of FHWA/AASHTO Scan Team to Japan, “ITS and Winter Operations Maintenance”
2000 Member of two person FHWA Technical Assistance in Winter Maintenance team to Argentina, July and August 2000
1999 – 2009 Member of TRB Committee A5001 Conduct of Research Committee
1999 – 2000 Member of SICOP Technical Working Group 2.1 on Chemical Slipperiness
1999 – 2000 Co-Chair, 5th TRB/NRC Symposium on Snow Removal and Ice Control Technology
1997 – 2000 Member of AASHTO Lead State Team on RWIS/Anti-Icing

Teaching Related Service:
2004 – 2008 Member of ASCE Committee of Faculty Development (Chair 2006-07)
2006 Served as Mentor at ASCE ExCEED Teaching Workshop at West Point, NY
2005 Served as Mentor at ASCE ExCEED Teaching Workshop at West Point, NY
2001 – 2006 Member of the ASEE Civil Engineering Division Executive Committee (Director 2001-03, Vice Chair/Program Chair 2003-04, Chair 2004-05)
2003 Served as Mentor at ASCE ExCEED Teaching Workshop at University of Arkansas
2002 Served as Assistant Mentor at ASCE ExCEED Teaching Workshop at Northern Arizona University
2001 Awarded a Fellowship to Attend the ASCE ExCEED Teaching Workshop at West Point, NY

SELECTED JOURNAL PUBLICATIONS:

W. A. Nixon, “Using a Maintenance Decision Support System in Winter Service Operations,” Journal of Public Works and Infrastructure, Vol. 2, No. 1, pp. 74-84, 2009
L. Qiu and W.A. Nixon, “Effects of Adverse Weather on Traffic Crashes: Systematic Review and Meta-Analysis,” Transportation Research Record, Journal of the Transportation Research Board, no. 2055, pp. 139 - 146, 2008.
K. Wang, D. E. Nelsen, and W.A. Nixon, “Damaging Effects of Deicing Chemicals on Concrete Materials,” Journal of Cement and Concrete Composites, vol. 28, issue 2, pp. 173-188, February, 2006.
W. A. Nixon and L. Qiu, “Developing a Storm Severity Index,” Transportation Research Record, Journal of the Transportation Research Board, no. 1911, pp. 143 -148, 2005.
R. Ettema and W.A. Nixon, “Ice-Tank Tests on Ice Rubble Loads against a Cable Moored Conical Platform,” ASCE Journal of Cold Regions Engineering, vol. 19, no. 4, pp. 103-116, December 2005.
W.A. Nixon and G.Kochumman, “A Prototype System to Extract Winter Weather Information for Road Users,” International Journal of the Computer, The Internet and Management, Vol. 11, No. 1, January – April 2003, pp. 42-50.

W. A. Nixon, Discussion of "The First Professional Degree: A Historic Opportunity," ASCE J. Professional Issues in Engineering Education and Practice, Vol. 127, No. 4, October 2001, pp. 198-199.

W. A. Nixon and M. A. Wilson, "Development and Use of an E-Mail-Based List-Serve for Winter Highway Maintenance," Transportation Research Record, Journal of the Transportation Research Board, No. 1741, pp. 124 – 128, 2001

W. A. Nixon, "Use of Abrasives in Winter Maintenance at the County Level," Transportation Research Record, Journal of the Transportation Research Board, No. 1741, pp. 42 – 46, 2001.

L.K. Edwards, W. A. Nixon, and R. S. Lakes, "Development of a Low-Cycle Fatigue Life Curve for 80In15Pb5Ag," Journal of Electronic Materials, Volume 29, No. 9, pp. 1084 – 1089, September 2000.

L.K. Edwards, R. S. Lakes, and W. A. Nixon, "Viscoelastic Behavior of 80In15Pb5Ag and 50Sn50Pb Alloys: Experiment and Modeling," Journal of Applied Physics, Volume 87, No. 3, pp. 1135 – 1140, February 2000.

L.K. Edwards, W. A. Nixon, and R. S. Lakes, "Developments of Stress/Strain Curves for 80In15Pb5Ag," Journal of Electronic Materials, Volume 28, No. 10, pp. 1084 – 1087, October 1999.

Y. C. Wei, W. A. Nixon, and Z. Shi, "Evaluation of wear Resistance of Snow Plow Blade Cutting Edges Using the Scratch Test Method," ASTM Journal of Testing and Evaluation, vol. 26, no. 6, pp. 527-531, 1998.

Whelan, A.E. and Nixon, W.A., "Creating Initial Cracks for the Interfacial Fracture of Ice," Cold Regions Science and Technology, Vol. 25, No. 2, 1997, pp. 153-157.

Nixon, W.A. and DeJong, D, "Low-rate Ice Scraping Tests," ASCE J. Cold Regions Engineering, Vol. 11, No. 2, 1997, pp. 159-166.

Weber, L.J. and Nixon, W.A., "Fatigue of Freshwater Ice," Cold Regions Science and Technology, Vol. 26, 1997, pp. 153 - 164.

Nixon, W. A., "Wing Crack Models of the Brittle Compressive Failure of Ice," Cold Regions Science and Technology, Vol. 24, 1996, pp. 41 - 55.

Weber, L.J. and W. A. Nixon, "Fracture Toughness of Freshwater Ice - Part I: Experimental Technique and Results," ASME Journal of Offshore Mechanics and Arctic Engineering, Vol. 118, No. 2, May 1996, pp. 135-140.

Weber, L.J. and W. A. Nixon, "Fracture Toughness of Freshwater Ice - Part II: Analysis and Micrography," ASME Journal of Offshore Mechanics and Arctic Engineering, Vol. 118, No. 2, May 1996, pp. 141-147.

Molinas-Vega, I., Bhatti, M. A., and Nixon, W. A., "A Nonlinear Fatigue Damage Model for Concrete in Tension," International Journal for Damage Mechanics, Vol. 4, No. 4, October 1995, pp. 362 - 379.

Nixon, W. A., "Improved Underbody Plowing," Transportation Research Circular, No. 447, July 1995, pp. 42-49.

Nixon, W. A. and L.J. Weber, "Reinforcement Percentage Effects on Bending Strength of Soil-Ice Mixtures," ASCE J. Cold Regions Engineering, Vol. 9, No. 3, September 1995, pp. 152 - 163.

Nixon, W. A., Ettema, R., Matsushita, M., and Johnson, R.C., "Model Study of Cable-Moored Conical Platform," ASCE J. Cold Regions Engineering, Vol. 6, No. 1, March 1993, pp. 12-31.

Nixon, W. A., Frisbie, T.R., and Chung, C.-H., "Field Testing of New Cutting Edges for Ice Removal from Pavements," Transportation Research Record, No. 1387, 1993, pp. 138-143.

Nixon, W. A., and L.J. Weber, "Flexural Strength of Sand Reinforced Ice", ASCE J. Cold Regions Engineering, Vol. 5, No. 1, pp. 14-27, 1991.

Nixon, W. A., and L.J. Weber, "Fatigue Crack Growth in Freshwater Ice: Preliminary Results", Annals of Glaciology, vol. 15, pp. 236-241, 1991.

Kuehn, G. A., R.W. Lee, W. A. Nixon, and E.M. Schulson, "The Structure and Tensile Behavior of First Year Sea Ice and Laboratory Grown Saline Ice", ASME J. Offshore Mechanics and Arctic Engineering, Vol. 112, No. 4, pp. 357-363, 1990.

Nixon, W. A. and E.M. Schulson, "A Notch Strengthening Effect in Freshwater Ice", Journal of Glaciology, Vol. 36, No. 122, pp. 107-111, 1990.

SELECTED CONFERENCE PROCEEDINGS:

- Nixon, W.A., Nelson, R., DeVries, R.M., and Smithson, L. (2012). Sustainability in Winter Maintenance Operations: A Checklist, Paper No. 12-3485, Proceedings of the 91st Annual Meeting of the Transportation Research Board, Washington DC January 22 – 26, 2012.
- Qiu, L. and Nixon, W. A. (2010). The Direct and Indirect Effects of Adverse Weather and Maintenance Operations on Traffic Crashes, Paper No. 10-4040, Proceedings of the 89th Annual Meeting of the Transportation Research Board, Washington DC January 10-14, 2010.
- Nixon, W. A., and Stoner, J. W. (2009). Impacts of Student Course Selection on Subsequent Career Trajectories, Proceedings of the 2009 ASEE Annual Conference, June 14 - 17, 2009, Austin, TX.
- Qiu, L. and Nixon, W.A. (2009). Winter Highway Maintenance Operational Performance Management and Performance Targets, Paper No. 09-3790, Proceedings of the 88th Annual Meeting of the Transportation Research Board, Washington DC January 11-15, 2009.
- Nixon, W. A. (2008). SafeLane Overlay Performance Testing: Winter 2005-06, Transportation Research Circular No. E-C126, Proceedings of the Seventh International Symposium on Snow Removal and Ice Control Technology, pp. 572-582, Indianapolis, IN.
- Nixon, W. A. (2008). The Role of Risk, Reliability, and Probability in the Interaction of Surface Weather and Transportation, Transportation Research Circular No. E-C126, Proceedings of the Seventh International Symposium on Snow Removal and Ice Control Technology, p. 611, Indianapolis, IN.
- Qiu, L. and Nixon, W.A. (2008). Modeling the Causal Relationships between Winter Highway Maintenance, Adverse Weather and Mobility, Paper No. 08-3101, Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington DC January 13-17, 2008.
- Qiu, L. and Nixon, W.A. (2008). Effect of Adverse Weather on Traffic Crashes, Paper No. 08-2320, Proceedings of the 87th Annual Meeting of the Transportation Research Board, Washington DC January 13-17, 2008.
- Nixon, W.A. (2007). A Survey of Faculty Development Activities in Civil Engineering, Proceedings of the 2007 ASEE Annual Conference, June 24-27, 2007, Honolulu, HI.
- Nixon, W.A. and Stowe, R.D. (2006). Operational Uses of Friction in Winter Maintenance," Proc. XIIth PIARC International Winter Road Congress, Paper on CD-ROM, Turin, Italy, April 2006.
- Nixon, W. A., Qiu, J., Qiu, L., Kochumman, G., and Xiong, J. (2005). "Ice Melting Performance for Ice Control Chemicals," Paper No. 05-1731, Proceedings of the 84th Annual Meeting of the Transportation Research Board, Washington DC January 9-13, 2005
- Nixon, W.A., Kochumman, G., Qiu, J., Qiu, L., and Xiong, J. (2004) "Role of Performance Specifications in Developing a Quality Control System for Winter Maintenance," in Transportation Research Circular Number E-C063, Proceedings of the Sixth International Symposium on Snow Removal and Ice Control Technology, pp. 555-563, June 7-9, 2004, Spokane, WA.
- Nixon, W.A. and Stowe, R., Operational Use of Weather Forecasts in Winter Maintenance: A Matrix Based Approach. In *Proceedings of 12th International Road Weather Conference SIRWEC*, Bingen, Germany, June 16-18, 2004.
- Kochumman, G. and Nixon, W. A., "A Comprehensive Approach to Decision Making in Winter Maintenance," Paper No. 04-3531, Proceedings of the 83rd Annual Meeting of the Transportation Research Board, Washington DC January 11-15, 2004
- Al Qadi, I. L., Loulizi, A., Flintsch, G. W., Roosevelt, D. S., Decker, R., Wambold, J. C. and Nixon, W. A., "Feasibility of Using Friction Indicators to Improve Winter Maintenance Operations and Mobility," Paper No. 04-2751, Proceedings of the 83rd Annual Meeting of the Transportation Research Board, Washington DC January 11-15, 2004
- Nixon, W.A., Ettema, R., Holly, F.M. Jr., and Stoner, J. W., "A Flexible Undergraduate Civil Engineering Curriculum," Session 2615, ASEE Annual Conference and Exposition, Nashville, Tennessee, June 2003

Nixon, W. A. and Bhatti, M. A., "A Methodology to Define the Body of Knowledge in Civil Engineering," Session 2315, ASEE Annual Conference and Exposition, Nashville, Tennessee, June 2003

Ettema, R. and Nixon, W. A., "Rubble-Ice Loads Generated by Cable-Moored Conical Platform: Ice-Tank Tests," *Ice in the Environment: Proceedings of the 16th IAHR International Symposium on Ice*, Dunedin, New Zealand, Vol. 2, pp. 16 – 22, December 2 – 6, 2002.

Nixon, W. A., "Managing Information for Optimal Winter Service Activities," Proc. XIth PIARC International Winter Road Congress, Paper II-27, Sapporo, Japan, 2002.

Nixon, W. A., "Research Needs in Weather Information for Surface Transportation – The Perspective of the User Community," in "Weather: Making it a National Priority in Surface Transportation" Proceedings of the 11th Annual ITS America 2001 Meeting, pp. 23-21, Miami Beach, FL, June 4-7, 2001.

Nixon, W.A., "The Use of Superclients in a Civil Engineering Capstone Design Class," Session 2615, ASEE Annual Conference and Exposition, Albuquerque, New Mexico, June 2001.

Nixon, W. A., and Nelson, R. J., "Developing a Long term Strategy to Enhance Winter Mobility in Argentina and Across the Andes," Invited Paper, Proceedings of the XIIth Congreso Argentino de Vialidad Y Transito, Buenos Aires, Argentina, October 1 – 5, 2001

Nixon, W.A., and Fischer, G. W., "Developing an Appropriate Writing Exercise for a Statics Class," Proceedings of the 31st ASEE/IEEE Frontiers in Education Conference, Reno, NV, October 10 – 13, 2001.

Nixon, W. A., "Development of a Graduate Course in Winter Highway Maintenance," paper no. 00-0565, Proceedings of the 79th Transportation research Board Annual Meeting, January 9 – 13, 2000.

Nixon, W.A., "The Use of Abrasives in Winter Maintenance at the County Level," Proceedings (CD-ROM) 1st Pacific Northwest Snowfighters (PNS) Snow Conference, Kelowna, British Columbia, Canada, 12-14 June, 2000.

Nixon, W. A. and Ostrem, C., "Offering a Graduate Level Class via the Internet," Proceedings (CD-ROM) of the 4th International Conference, Hydroinformatics 2000, Cedar Rapids, IA, 23-27 July, 2000.

Nixon, W.A., "Using Underbody Plows for Efficient Removal of Compacted Snow and Ice," Proceedings (CD-ROM) of the 1st Provia Invernal en el Fin Del Mundo, Tierra del Fuego, Argentina, 7-11 August, 2000.

Nixon, W. A., "The Role of Information Technology in Winter Service Activities," Proceedings (CD-ROM) of the 1st Provia Invernal en el Fin Del Mundo, Tierra del Fuego, Argentina, 7-11 August, 2000.

Nixon, W. A., "The Use of Abrasives in Winter Maintenance," Proceedings (CD-ROM) of the 1st Provia Invernal en el Fin Del Mundo, Tierra del Fuego, Argentina, 7-11 August, 2000.

Nixon, W. A., "The Use of Abrasives in Winter Maintenance at the County Level," Proceedings of the 5th International TRB Symposium on Snow Removal and Ice Control Technology, Volume I, Paper B3, Roanoke, VA, September 5-8, 2000.

Nixon, W. A. and Wilson, M. A. "The Development and Use of an E-mail Based List-Serve for Winter Highway Maintenance," Proceedings of the 5th International TRB Symposium on Snow Removal and Ice Control Technology, Volume II, Paper I3, Roanoke, VA, September 5-8, 2000.

Nixon, W. A. and Wei, Y.-C., "Field Comparison of Snowplow Cutting Edges," Proc. Xth PIARC International Winter Road Congress, Vol. 2, pp. 477-486, Lulea, Sweden, March, 1998.

Nixon, W. A., Novotny, C., and Kruger, A., "Developing an AI based Expert System to Control an Underbody Snowplow," Proc. Xth PIARC International Winter Road Congress, Vol. 2, pp. 571-576, Lulea, Sweden, March, 1998.

Nixon, W. A., "Friction as a Tool for Winter Maintenance," Proc. Crossroads 2000, pp. 86-89, Ames, Iowa, August 19-20, 1998.

Nixon, W. A. and Smithson, L.D., "A Methodology for Conducting Research into Winter Highway Maintenance," Proceedings of the Semisecentennial Transportation Conference Proceedings, pp. 188-191, May 13-14, 1996, Ames, Iowa.

Nixon, W. A. and Potter, J. D., "Measurements of Ice Scraping Loads on Underbody Plows during Service Operations," Proc. 4th International Symposium on Snow Removal and Ice Control Technology, TRB/NRC, Paper D-4, Vol. II, Reno Nevada, August, 1996.

Nixon, W. A. and Smithson, L.D., "A Consistent Methodology for Conducting Research into Winter Highway Maintenance," Proc. 4th International Symposium on Snow Removal and Ice Control Technology, TRB/NRC, Paper A-10, Vol. I, Reno Nevada, August, 1996.

Whelan, A. E. and Nixon, W. A., "Evaluating J-Integrals for Ice-Substrate Interface Cracks using Finite Element Analysis," Proc. POAC 95, 13th International Conference, vol. 3, August 15-18 1995, Murmansk, Russia.

Nixon, W. A., "Improved Underbody Plowing," Proc. 10th Equipment Management Workshop, TRB/NRC, Paper D-4, July 1994.

REPORTS AND OTHER PUBLICATIONS:

Nixon, W. A., "Grand Challenges: A Research Plan for Winter Maintenance," Final Report of NCHRP 20-07 Task 287, December 2010.

Nixon, W. A., and Xiong, J., "Investigation of Materials for the Reduction and Prevention of Corrosion on Highway Maintenance Equipment: Final Report of Project TR 472," IIHR Technical Report No. 472, May 2009.

Nixon, W. A., "Field Testing of Abrasive Delivery Systems in Winter Maintenance: Final Report of Project TR 458," IIHR Technical Report No. 471, May 2009.

Qiu, L. and Nixon, W. A., "Performance Measurement for Highway Winter Maintenance Operations: Final Report of Project TR 491," IIHR Technical Report No. 474, June 2009.

Nixon, W.A., Kochumman, G., Qiu, L., Qiu, J., and Xiong, J., "Evaluation of Using Non-Corrosive Deicing Materials and Corrosion Reducing Treatments for Deicing Salts: Final Report of Project TR 471," IIHR Technical Report No. 463, June 2007, 71 pages.

Nixon, W.A., Davison, M., and Kochumann, G., "Living Snow Fences: Final Report of Project TR 460," IIHR Technical Report No. 460, November 2006, 39 pages.

Nixon, W.A., Kochumann, G., Novotny, C., and Kruger, A., "Development of a Computer Controlled Underbody Plow: Final Report of Project TR 412," IIHR Technical Report No. 448, January 2006, 43 pages.

Nixon, W. A., "Optimal Usage of Deicing Chemicals When Scraping Ice: Final Report of Project HR 391," IIHR Technical Report #434, November 2003, 132 pages.

Pisano, P., Nelson, R., Blackburn, R., Brandau, S., Clonch, D., Doherty, J., Jones, D., Kain, C., Lariviere, P., Mandt, G., McCarthy, J., Nixon, W. A., and Roosevelt, D., "Intelligent Transportation Systems and Winter Operations in Japan," Federal Highway Administration, Report No. FHWA-PL-03-106, September 2003, 58 pages.

Nixon, W. A., "Why aren't YOU anti-icing yet? Five common excuses debunked," APWA Reporter, Vol. 70, No. 9, pp. 24-25, September 2003.

Nixon, W.A., "Guidelines for Winter Maintenance on Thin Maintenance Overlays," IIHR Technical Report No. 423, May 2002, 24 pages.

Nixon, W. A., "The Use of Abrasives in Winter Maintenance: Final Report of Project TR 434," IIHR Technical Report #416, March 2001, 28 pages.

Nixon, W.A., and Williams, A.D., "A Guide for Selecting Anti-Icing Chemicals," IIHR Technical Report No. 420, Version 1.0, October 2001, 21 pages.

Nixon, W. A., "Two ways to avoid reinventing the wheel in winter maintenance issues," APWA Reporter, Vol. 67, No. 10, pp. 16-17, October 2000.

Nixon, W. A. and Nixon, V. S., "A blind Deicer Test Conducted for the Minnesota Corn Producers," IIHR Limited Distribution Report No. 280, January 2000, 10 pages.

Nixon, W. A., and Wei, Y., "Final Report of Snow Plow Cutting Edge Test and Evaluation (I & E) Program, FHWA Work Order DTFH71-96-TE028-IA-43," IIHR Limited Distribution Report No. 277, February 1999, 21 pages.

Nixon, W.A., "The Potential of Friction as a Tool for Winter Maintenance: Iowa Department of Transportation Project TR 400," IIHR Technical Report #392, February 1998, 29 pages.

Nixon, W.A. and Potter, J.D., "Measurement of Ice Scraping Forces on Snow-Plow Underbody Blades: Iowa Department of Transportation Project HR 372," IIHR Technical Report # 385, February 1997, 70 pages.

Nixon, W. A., Wei, Y. and Whelan, A. E., "Field Measurements of Ice Scraping Loads on Front Mounted Plow Blades: Iowa Department of Transportation Project HR374," IIHR Technical Report # 388, October, 1997, 34 pages.

Whelan, A. E. and W. A. Nixon, "The Interfacial Fracture Mechanics of Ice: FAA Project 94-G-025 Final Report," IIHR Technical Report # 377, March 1996, 102 pages.

Nixon, W. A. and Wei, Y.-C., "Snow Plow Cutting Edge Evaluation," South Dakota DOT Report No. SD95-14F, April 1996, 26 pages.

Whelan, A. E. and W. A. Nixon, "Mechanical Testing of Expanded Polyurethane Foam," IIHR Limited Distribution Report #246, September 1996, 34 pages.

Nixon, W. A., Gawronski, T. J., and Whelan, A. E., "Development of a Model for the Ice Scraping Process: Iowa Department of Transportation Project HR361," IIHR Technical Report # 383, October, 1996, 57 pages.

Nixon, W. A. and N. S. J. Foster, "Strategies for Winter Highway Maintenance," University of Iowa Public Policy Center Report, November 1996, 68 pages.

Nixon, W. A. ASCE Journal of Cold Regions Engineering Editorial, "Winter Highway Maintenance," ASCE J. Cold Regions Engineering, Vol. 9, No. 3, September 1995, pp. 105 - 106.

Nixon, W. A., "Improved Cutting Edges for Ice Removal," National Research Council, SHRP Report, SHRP-H-346, 1993, 98 pages.

Nixon, W. A. and T.R. Frisbie, "Field Measurements of Plow Loads During Ice Removal Operations: Iowa Department of Transportation Project HR334," IIHR Technical Report #365, November 1993, 126 pages.

TECHNICAL PRESENTATIONS

In the past ten years, I have made more than 30 technical presentations around the world, of which 17 have been keynote or equivalent invited presentations.

