# Valuing a Life: Injury Law and the Calculation of Future Lost Income Capacity

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# Injury Law

Mr. Glass took a sip of water and closed his eyes. “I’ve been retired for a few years now, and this was over fifteen years ago. But there is a reason I remember it. I remember it because the case was so deeply sad. I remember it because we had a run in just a few years ago.” He spoke slowly, as if reliving the experience. Carmen, although only seven at the time of the accident, had already been in several homes. Her medical history indicated that prior to the accident she already had a moderate learning disability. This posed a challenge because “there were questions as to which damages the accident caused and which already existed.”

“It happened at a park. She was climbing on the monkey-bars. She fell and hit her head. When we finally found the original plans of the park where the jungle gym was built, we walked to the spot where Carmen fell, and under there was concrete. It wasn’t even sand, it was concrete.” Carmen hit her frontal lobe and suffered severe brain damage. After her fall, she became increasingly aggressive, defiant, impulsive, and her learning disabilities appeared exacerbated. The evaluating neurologist felt that the damage was mostly related to the fall and was permanent. Carmen was deeply affected behaviorally. As she got older, she became “kind of wild” and “excessively disobedient.”

When the case was filed, the defense refused to settle. “They wouldn’t pay us a penny, so we went to trial,” said Mr. Mr. Glass. “We won the case, but the award was only two hundred thousand dollars. The lawyers took twenty-five

percent, which is the standard amount. Carmen got around one hundred forty thousand." Mr. Glass sighed, "the fact that she was a black foster child definitely affected the award amount. A lot of people consider foster children damaged goods. She had been in around seven foster homes. That said, she had been doing pretty well in this one. Luckily for Carmen, the jury also looks at how cute the kid is. If the kid is fat and ugly then they often won't give as much. Carmen was a pretty, thin, slight little girl."

Mr. Glass would not hear from Carmen again for many years. When she was twenty-two, Carmen came to Mr. Glass's firm to petition access to her trust. She was accompanied by two young men. They tried to "come into my office with Carmen, but I had them sit in the waiting room." That day, Carmen requested permission to withdraw the entirety of her award. "I tried to talk to her and explain that she shouldn't do this! But she was out of it. She wasn't listening. These two guys were in the waiting room. They were in the waiting room like two dogs salivating." He paused again, "this case, this case was deeply sad. Chances are it was for drugs, I don't know where she is now. That was the last I heard of Carmen." He paused and then finished with a final thought. "I wonder, sometimes. I wonder if it's possible that Carmen's fate was sealed at the moment of the verdict. Did she ever have a chance?"

Can an incident predict a life outcome? Can it determine the value of a life? How did Carmen's black, foster, and gendered body affect the decisions around her case? Monetary compensation in the case of injury is a familiar concept in the United States. At the same time, calculating the value of life is completely foreign

to us. It is common knowledge that certain injuries are "worth" more than others; some injuries yield enormous awards while others diminutive ones. Which lives matter and which are worth more in the processes of law?

Cases involving injury to children highlight this problem powerfully. When a child is wrongfully injured, it can be difficult to project their lost earning capacity since there is no occupational record establishing potential. In the absence of this data, lawyers and forensic economists will fight to determine how much that child lost in future earning capacity due to the accident. They do so with tools and charts that take into account age, race, sex, and parental educational attainment, amongst other variables. In my thesis I will demonstrate how race and gender biases emerge in such calculations. I call for an examination of this process that is largely unquestioned despite consistent criticisms of tort law as a whole.

I am the second oldest of six children. My youngest two siblings are adopted from Ethiopia. When I learned that if injured in an accident, my younger brothers, Harry and Getachew, or my younger sisters, Miriam and Bezawit, would potentially receive extremely different damage awards I was stunned. Growing up in identical conditions, in the same household, with the same parents, within the same school district, still, Getachew, a black male, and Bezawit, a black female, would be considered literally worth less than my biologically related siblings. How could this system be perpetuated within the justice system? How could this not be more hotly contested?

My central purpose in this thesis is to analyze the process of valuing life through the calculation of future lost income capacity within the institution of tort

law. Through interviews and engagement with economic journals and case law, I examine how injury attorneys, defense attorneys, and forensic accountants, at the level of their everyday working practice, come to produce a certain defensible reality. Lives are valued disparately and such inequalities become reproduced and justified cyclically. A focus on experts unpacks an institution ordinarily examined at the institutional level.

Located between two realms of knowledge, the judicial/legal and the statistical/data-driven, notions of value and morality come to interact at the site of the injured body. Injury will be transmuted by numbers and in affect erased. Despite this erasure, some type of contestation will occur about numbers and objectivity at this site. Through an examination of the erasure of the material condition, we can perhaps begin to consider how such erasures might be rendered visible. The visibility of material conditions and the importance of the physical is critical in the examination of a body of law that considers itself to be detached.

The focus of this work on children is primarily because children lack occupational history and therefore are more obvious sites for the placement of notions of value in determining their future potential.[1] At the site of the child there are fewer variables that can be inputted into calculations of future lost income capacity, and therefore they become an impressive control group. In addition to this methodological rationale, I chose to focus on children because they are more likely

[1] This common practice is described in *Plaintiff Magazine*: "When a child is injured so severely that she will never be employed, there is an unquestionable loss of earning capacity. But how can it be measured? This is where expert testimony is absolutely necessary. Lost earning capacity of an infant or child can be determined from sociological and statistical data.": Blumberg, John B. "Damages for loss of earning capacity: What could have been." *Plaintiff Magazine*. (2012)

to be treated empathically than are adults. I hope that through a focus on children this area of disquietingly absent activism will be made visible. In *Frames of War*, Judith Butler discusses what it is that determines a life to be recognizable and "grievable." Butler writes that it is "only under conditions in which the loss would matter does the value of the life appear. Thus, grievability is a presupposition for the life that matters."[2] Some lives lost are not considered a loss. In focusing on a grievable population I attempt to avoid this apathy.

**History of Tort Law**

Before proceeding with the argument, it is first important to understand tort law's evolution as a legal category. Deciding upon the precise definition of a tort is a difficult task because the category is so expansive. The term "tort" comes from the Latin word for "twisted" and the French term for "wrong."[3] Simply speaking, to commit a tort is to do a "wrong" to another person. Tort law assumes that both as individuals and as society we all have interests that the law should protect. Therefore, the wrong that qualifies as a tort is only the wrong that ultimately infringes on the interests that law protects. This body of law covers a wide range of situations ranging from a shopper injured in a store, a patient injured by a doctor, or a farmer whose land has been trespassed upon. Most tort law is made on the state level as opposed to the federal court, and are part of civil law as opposed to criminal.[4] Describes as as a "a residual category of civil liability," questions to be decided in most of such cases is a question of 'liable or not liable?' as opposed to

[2] Butler, Judith. *Frames of War: When Is Life Grievable?* London: Verso, 2009.
[3] Abraham, Kenneth. The Forms and Functions of Tort Law (2000)
[4] Ibid.

'guilty or not guilty?'[5] Liability is important because in this trope, as opposed to guilt or fault, we find economic calculations of value. The pursuit of liability evokes the creation of value. The root of tort law lies embedded in the productivity of individuals. Therefore, it values the person in terms of their earning capacity.

"An eye for an eye" is no longer the legal protocol in the case of injury. Although models of compensation for injustice can be traced back for thousands of years, tort law as an independent branch of law can be considered a relatively recent phenomenon in the institutionalized legal realm.[6] The emergence of injury law has often been attributed to the emergence of industrialization. The industrial revolution not only increased the rate of workplace injury, but also drastically increased the number of interactions between strangers in the workplace and consumer sphere.[7] The history of tort law has come to affect how it plays out in the contemporary. With its rise deeply rooted in the industrial revolution, I take a Marxist lens to argue that tort law is inextricably linked to notions of productivity and labor value.[8]

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[5] Abraham, Kenneth. The Forms and Functions of Tort Law, Page 2 (2000)

[6]In fact, "torts was not considered a discrete branch of law until the late nineteenth century. The first American treatise on torts appeared in 1859; was taught as a separate law school subject 1870; first case book 1874." White, Edward. *Tort Law in America: An Intellectual History*. New York: Oxford University Press, 1980.

According to one scholar, until as late as 1900 it was not even clear if torts was "even a coherent field of the law or an identifiable subject of separate study."[6] Sugarman, Stephen D. "A Century of Change in Personal Injury Law." *California Law Review* 88, no. 6 (2000)

[7] Schafer, Hans-Bernd. "Tort Law: General." *University of Hamburg Institute of Law and Economics*. (1999): "Before the industrial revolution tort law was a rather unimportant field with shying horses as an important cause of damages. With steam engines, modern traffic (locomotive, motor vehicles) and hazardous products the number and severity of accidents rose dramatically. This gave rise to the development of modern tort law, especially the negligence doctrine and the slow expansion of strict liability for risks caused by very dangerous activities."

[8] Marx, Karl (1867-1879) 1925-1926 *Capital: A Critique of Political Economy.* 3 vols.

Tort law emerged as a legal category in the years between 1800 and 1870.[9] During this age accidents were becoming the most economically and politically salient source of tort cases. The birth of railroads and then motor vehicles resulted in an age in the United States of a truly unprecedented number of accidental deaths and injuries. The introduction of mass-marketed consumer products exacerbated the emphasis on torts. This trend continued and increased after World War II when during the post war affluence. Dominant American manufacturers were expanding and needed a larger supply of workers to work in their factories. This inextricable link between consumption and production shapes the contemporary tort law industry, and thus expert's approach to valuing life.

In the early 1980s there began a new movement in tort law that demanded tort reform. Proponents of this movement argue that tort law was chronically overemployed and resulted in excessive awards. Tort reform movements seek to limit award amounts and reduce the number of injury claims. A key aspect of this movement is the popularization of certain cases as examples of this compensation culture. Most adults in the United States remember the McDonald's hot coffee case, in which an elderly woman sued after receiving third degree burns from a spilled cup of McDonald's drive through coffee.[10] The jury awarded her 2.7 million dollars in damages before the judge reduced the award to 480 thousand dollars.[11] Despite

[9] Goldberg, John C. P., and Benjamin Charles Zipursky. *The Oxford Introductions to U.S. Law*. Oxford: Oxford UP, 2010. Print. Page 14. There was an increase in the tendency for lawyers to place "into a separate category legal obligations that accompany activities and occupations irrespective of agreement." This became the body of law now known as contract law, and paved the way for torts to emerge as wrongs "involving the breach of obligations not to injure others, apart from obligations determined by agreement."

[10] Halton, William. "Java Jive: Genealogy of a Juridical Icon": *Miami Law Review* 56 120 (2011)

[11] Ibid.

this reduction, the McDonald's coffee case was employed as a "perfect example" for the need to limit the trajectory of tort law cases.[12]

**Purpose of Tort Law**

When asked what the purpose of injury law is, Mr. Martino, an injury attorney at a prominent Boston law firm, answered with confidence. The goal, he stated, "is definitely to make the person whole again." He continued, "your goal as an attorney is not to be a crusader. That said, the offshoot, or the insularly benefit of tort law is that it makes the world way safer. These accidents are not happening with the frequency that they once did."

The purpose of injury law has been predominantly debated on two fronts. Is it a market corrector? Or is it a means of compensatory justice? The market corrector ideology, found in many economic and law texts, claims that tort law is "a system of rules designed to maximize wealth so as to minimize the costs associated with engaging in daily activities." [13] The history of tort law is the best support for the market corrector perspective. Spurred extensively by the industrial

[12]Despite the common critique of injury law as frivolous or inappropriate, there are those who claim that not enough suits are being filed. Laura Nader's 2002 work, *The Life of the Law*, addresses this new era in which the injured are portrayed as overzealous. This portrayal is used to make a case for the curbing of eligibility for larger awards. Nader argues that, to the contrary, the "life and death of the law" derives from the plaintiff. Restriction of tort eligibility would be an infringement on the right for an individual to seek justice when wronged. In Nader's discussion of the search for justice as a fundamental part of the human trajectory, she claims that the direction of law is dependent on who can and wants to make use of it. In contemporary tort law the predominant users of the law are those in positions of power who "have increased manufacturers efforts to reduce the legal protection afforded by trial by jury." This perspective is echoed by Richard Abel who claims that in a lifetime sixty percent of Americans will have an injury for which they could rightly sue, but ninety percent of the injured will not pursue a lawsuit. This evidence is introduced to counter the notion that we exist within a "compensation culture" where people turn to lawsuits constantly. Like Nader then, Abel argues for a more expansive use of tort law.

[13] Barnes, David and Lynn A. Stout, "The Economic Analysis of Tort Law" page 27 (1992); Chamallas, Martha, and Jennifer B. Wriggins. *The Measure of Injury: Race, Gender, and Tort Law*. New York, NY: New York University Press, page 192. 2010.

revolution, tort law has been shaped by the desire to correct the market and limit dangerous behaviors by employers as a general goal of liability law.[14] Emerging during the industrial revolution, a time of the increasingly dangerous workplace in which workers were unfamiliar with their colleagues and bosses, tort law became a way to correct a dangerous market. Therefore, the function of tort liability is to promote optimal deterrence of excessively risky activity.[15]

On the other hand, the much more rights and individual based compensatory justice perspective claims that tort law serves to correct harm done by restoring the injured person to their pre-injured condition.[16] In fact, the first American treatise on tort law described it in such terms: "The liability to make reparation for an injury is said to rest upon *an original moral duty*, enjoined upon every person, so to conduct himself or exercise his own rights as not to injure another."[17] Jules Coleman, an advocate for this perspective concludes that tort law is "essentially an institutional manifestation of a principle of corrective justice" after an extensive

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[14] This view has also been referred to as the the "economic" view, the "optimal deterrence" function, and the "instrumental" function. Sheinman, Hanoch. "Tort Law and Corrective Justice". *Law and Philosophy* (2003); Balkin, J. M., William M. Landes, and Richard A. Posner. "Too Good to Be True: The Positive Economic Theory of Law." *Columbia Law Review* 87, no. 7 (1987): 1447; John C. P. Goldberg and Benjamin C. Zipursky, "The Moral of MacPherson", *University of Pennsylvania Law Review*. 146 (1998), pp. 1733- 1847.

[15] Abraham, Kenneth S. *The Forms and Functions of Tort Law*. New York, NY: Foundation Press, 2007. P. 18

Roger Traynor, often viewed as a father of tort law, aligns with the market corrector perspective. Traynor writes, "those who suffer injury from defective products are unprepared to meet its consequences. It is to the public interest to discourage the marketing of products having defects that are a menace to the public." For the instrumentalist then, tort law is (or should be) predominantly concerned with the effect that the liability or consequence will have on others, outside of the particular actors in the lawsuit; Traynor, J. writing on *Escola v. Coca-Cola Bottling Co of Fresno.* (150 P 2d 436.) 1994.

[16] Ibid. This perspective is also discussed as the "corrective justice" perspective, the "rights based" perspective, and the "make-whole-again" perspective.

[17] Geistfeld, Mark, Compensation as a Tort Norm. *NYU School of Law, Public Law Research Journal No. 13-54* (2013). NYU School of Law, Public Law Research Paper No. 13-54; Coleman, Jules L., "The Economic Structure of Tort Law" *Faculty Scholarship Series.* Paper 4196. (1988).

analysis of tension between the goals of "justice and economic efficiency" in the "allocation of risk." This means that tort law corrects and at its core seeks to repair wrongful losses. Here we find the central concepts of tort law as being, "harm, cause, repair, and fault." He argues that tort law "seeks to secure justice between parties by imposing the duty to compensate victims' wrongful losses on the injurers" as opposed to enhancing market transactions.[18]

The corrective justice perspective is complicated when we consider that the core of this argument rests on the notion that the "individual injurer directly compensates an individual victim, with the injurer's own money."[19] Today, the connection between the injurer and victim has become less direct. No longer does the injurer pay the victim directly. Instead, the injurer will be paid by the injurer's liability insurance, or in the case of injury by a corporation, the cost of compensating the victim may fall onto customers, employees, or shareholders.[20]

Through a study of the literature and interviews with experts it becomes clear that this debate ultimately obscures the reality of the exceedingly interconnected nature of the compensatory and market models. The debate results in the more nuanced and disparate differences in tort law settlements being rendered both invisible and irrelevant. The agents, interests, and bodies involved in cases of injury law reflect that tort adjudication has other essential elements. In this dichotomy the differences in calculation of lives are muted and thus equalized. If we are to agree that the purpose of injury law is predominantly a market corrector,

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[18] Coleman, Jules L. "Risks and Wrongs" *Faculty Scholarship Series.* Paper 4191. (1992).
[19] Abraham, Kenneth. The Forms and Functions of Tort Law (2000) P 17.
[20] Harrington, Scott, and Robert E. Litan. "Causes of the Liability Insurance Crisis". *American Association for the Advancement of Science*: 737–41.( 1988)

why then would the characteristics of the injured be relevant? After all, if the purpose is to dissuade the market from producing faulty products or behaving negligently, does valuing some lives as worth less than others serve as a relevant means of obtaining this end result? Conversely, if we are to believe that this is a means of compensatory justice, intended to restore an injured individual to their pre-accident potential, does it achieve this goal? Moral and economic reasoning intertwine in the production of value and produce biases of race and gender.

**Argument**

I approach the study of tort law as a form of power to govern and value bodies.[21] There has been much work done on this in the field of legal anthropology, particularly in the study of empire and colonial state.[22] I focus on the United States to make similar claims on the relationship of law to power. If law is a form of power, then it is only logical that questions are raised regarding activism and democracy. In fact, Sally Falk Moore writes that the concern of modern day legal anthropology involves an increasingly wide vision of the "political milieu in which law is imbricated."[23] She argues that this is a commentary on the possibility of realizing democracy made through field work. I follow her approach to the study

[21] Bentham, Jeremy, J. H. Burns, and H. L. A. Hart. *A Fragment on Government*. Cambridge: Cambridge University Press, 1988; Benjamin, Walter. Critique of Violence. In Reflections: Essays, Aphorisms, Autobiographical Writings. New York: Schocken Books (1978); Agamben, Giorgio. Homo Sacer: Sovereign Power and Bare Life. *Stanford: Stanford University Press.* pp.15-29. (1998)
[22] Chatterjee, Partha. *The Nation and Its Fragments: Colonial and Postcolonial Histories*. Princeton, NJ: Princeton University Press, 1993; Deutsch, Jan-Georg, Peter Probst, and Heike Schmidt. *African Modernities: Entangled Meanings in Current Debate*. Oxford: James Currey, 2002; See: Comaroff, J. *Governmentality, Materiality, Legality, Modernity On The Colonial State in Africa;* Engle Merry, Sally. Law and Colonialism. *Law & Society Review*, Vol 25. No. 4 (1991)
[23] Moore, Sally Falk. "Certainties Undone: Fifty Turbulent Years of Legal Anthropology, 1949-1999." *Journal of the Royal Anthropological Institute* 7, no. 1 (2001): 95-116.

of the law to ask questions about the state of freedom and the ideal of liberal democracy.[24]

The ethnographic study of informal legal processes in the United States has been conducted in order to make a commentary on culture and the law.[25] I take note of this approach, but argue that the same processes can be observed in the study of the formal judicial process and institutions. Particularly, I call attention to the study of tort law, an understudied arena of law that is rarely addressed by anthropologists.[26] In the study of tort law one must examine the actors that operate within the institution. These actors embody certain notions of expertise that become critical in shaping and reproducing forms of knowledge.

Expertise, according to Summerson, is something people do rather than something people have or hold.[27] For the purposes of this thesis, I use Dominic Boyer's definition of the expert as "an actor who has developed skills in, semiotic-epistemic competence for, and attentional concern with, some sphere of practical activity."[28] Practices of expertise allow the routine organization of boundaries of knowledge, which allows for the constructions of professions and disciplines.[29]

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[24] Ibid.

[25] Abel, Richard L. *The Politics of Informal Justice*. New York: Academic Press, 1982; Conley, John M., and William M. O'Barr. *Rules versus Relationships: The Ethnography of Legal Discourse*. Chicago: University of Chicago Press, 1990; Greenhouse, Carol J. *Praying for Justice: Faith, Order, and Community in an American Town*. Ithaca: Cornell University Press, 1986; Merry, Sally Engle. *Getting Justice and Getting Even: Legal Consciousness among Working-class Americans*. Chicago: University of Chicago Press, 1990.

[26] Nader, Laura. *The Life of the Law: Anthropological Projects*. Berkeley: University of California Press, 2002; Jain, Sarah S. Lochlann. *Injury: The Politics of Product Design and Safety Law in the United States*. Princeton, NJ: Princeton University Press, 2006.

[27] Carr, E. Summerson. "Enactments of Expertise." *Annual Review of Anthropology*39, no. 1 (2010): 17-32.

[28] Boyer, Dominic. "Thinking through the Anthropology of Experts." *Anthropology in Action* no. 2 (2008): 38-46.

[29] Summerson: 2010; Abbott AD. "Boundaries of Social Work and The Social Work of Boundaries." Soc. Serv. Rev. 69:545–62 (1995); Brenneis, Donald. "Discourse and Discipline at the National

Anthropological interest in contemporary knowledge practices and expertise has evolved to address a diversity of fields, including finance[30], international law[31], technology,[32] accounting/audit,[33] gender,[34] journalism,[35] and of course, international development.[36] I focus on expertise in the legal realm, but because of the nature of forensic accounting this study extends to a study of knowledge production in accounting and statistics.

Annelise Riles provides a technical and instrumental analysis of expertise that is particularly useful in evaluating this aspect of tort law. She encourages the framework of governance as "mediated through the technical legal knowledge." She argues that expert sees himself as a "modest but expertly devoted technician."[37] I contest this characterization through identification of the anxious way that the forensic accountant refers to himself as "not just a hired gun" indicating that he may want to be seen as this "modest but expertly devoted

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Research Council: A Bureaucratic Bildungsroman." *Cultural Anthropology* 9, no. 1 (1994): 23-36; Gal S, Irvine JT. The boundaries of languages and disciplines: how ideologies construct difference. Soc. Res. 62:967–1001(1995)

[30] Riles, Annelise. Collateral Knowledge: Legal Reasoning in the Global Financial Markets. Chicago: University of Chicago Press, 2011. Page 64; Ho, Karen. *Liquidated: An Ethnography of Wall Street*. Durham: Duke University Press, 2009; Maurer, Bill. *Mutual Life, Limited: Islamic Banking, Alternative Currencies, Lateral Reason*. Princeton, NJ: Princeton University Press, 2005.

[31] Riles, Annelise. 2006. "Anthropology, Human Rights, and Legal Knowledge: Culture in the Iron Cage". *American Anthropologist* 108

[32] Riles, Annelise. "Real Time: Unwinding Technocratic and Anthropological Knowledge." *American Ethnologist* 31, no. 3 (2004): 392-405; Zaloom, Caitlin. *Out of the Pits: Traders and Technology from Chicago to London*. Chicago: University of Chicago Press, 2006.

[33] Strathern, Marilyn. *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy*. London: Routledge, 2000; Power, Michael. *The Audit Society: Rituals of Verification*.

[34] Frank, Francine, Kira Hall, and Mary Bucholtz. "Gender Articulated: Language and the Socially Constructed Self." *Language* 73, no. 4 (1997)

[35] Boyer, Dominic. 2010. "Digital Expertise in Online Journalism (and Anthropology)".*Anthropological Quarterly* 83 (1).

[36] Ferguson, James. *Global Shadows: Africa in the Neoliberal World Order*. Durham: Duke University Press, 2006; Ferguson, James, and Akhil Gupta. "Spatializing States: Toward an Ethnography of Neoliberal Governmentality." *Anthropologies of Modernity*: 105-31.

[37] Riles, Annelise. Collateral Knowledge: Legal Reasoning in the Global Financial Markets. Chicago: University of Chicago Press, 2011. Page 64.

technician" but may perceive himself differently. Further, Riles discusses the "purported political neutrality" of law as deeply entrenched. The purported political neutrality of the law may serve the function of rendering invisible an area that is far from politically neutral, minimizing instances of activism. Morality and the economic narrative comes to affect the purported neutrality. Within my own work, experts discuss this neutrality in respect to objectivity.

The term objectivity, commonly associated with impartiality, neutrality, and independence, in this case is predicated on good science. The appeal of objectivity is that it is free from subjectivity, personal agenda, biases, or gratuitous speculation. In this study objectivity has a sense of anxiety surrounding it. The experts hope to portray that they are free from bias, and are not "hired guns." They constantly refer to their occupational balance in that although they may work predominantly for one side, they do on occasion work on the other. I proceed by using Porter's definition of objectivity as the opposite of subjectivity as opposed to providing a hard definition of the term.[38]

The number's ability to negate the need for physical interaction with the injured is a powerful one. The authoritative use of numbers in the calculation of future lost income capacity and the valuation of life is central to this examination. In *The Condemnation of Blackness* Muhammad begins with the question "By what means did black and white social scientists, social reformers, journalists, antiracist activists, law enforcement officials, and politicians construct, contest, and

[38] Porter, Theodore. "Objectivity as Standardization: The Rhetoric of Impersonality in Measurement, Statistics, and Cost-Benefit Analysis" in *Rethinking Objectivity.* Durham: Duke University Press, 1994.

corroborate their claims regarding black criminality?"[39] In this initial question, there is the implicit assumption that there has been a construction of statistics about black criminality. Experts, Muhammad implicitly suggests, play a role in shaping the accepted. Muhammad writes that experts did not identify as racists, but rather, stated that the "numbers speak for themselves."[40] I argue that this approach to criminal law statistics needs to be taken in analyzing civil law, particularly in the calculation of future lost income capacity.

The belief that numbers can "speak for themselves" and successfully predict what would have been the future of the injured person is central to this critique. In fact, Mary Poovey argues that the "modern fact" is derived from numbers; they have a powerful role in governing and valuing bodies.[41] In Ian Hacking's *The Taming of Chance* he argues that in the 20th century, society began to become statistical. A new governing law came into existence, "analogous to the laws of nature, but pertaining to people."[42] This new governing law, according to Hacking, is probability. Central to probability is the logic that there is normalcy and then deviations from normalcy. Suddenly, chance, which was before "the superstition of the vulgar" was central to social sciences.[43]

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[39] Muhammad, Khalil Gibran. *The Condemnation of Blackness: Race, Crime, and the Making of Modern Urban America.* Cambridge, MA: Harvard University Press, 2010.
[40] Ibid. p 8
[41] Merry, Sally Engle. "Measuring the World: Indicators, Human Rights, and Global Governance." *Current Anthropology* 52, no. S3 (2011); Hacking, Ian. *The Taming of Chance.* Cambridge: Cambridge University Press, 1990.; Poovey, Mary. 1998. *A History of the Modern Fact: Problems of Knowledge In The Sciences Of Wealth And Society.* Chicago: University of Chicago Press; Porter, Theodore M. 1995. *Trust in Numbers: The Pursuit of Objectivity In Science And Public Life.* Princeton, NJ: Princeton University Press
[42] Hacking, Ian. *The Taming of Chance.* Cambridge: Cambridge University Press, 1990.
[43] Ibid: Expansion of enumeration through example of census: "The first American census asked four questions of each household… The tenth decennial census posed 13,010 questions… addressed to people, firms, farms, hospitals, churches and so forth. This 3,000-fold increase is striking, but vastly understates the rate of growth of printed numbers."

In the form of data presented by experts, numbers and statistics become objective and inarguable truths. Surely, we understand that there must be a level of interpretation going on, but this interpretive element is elusive and muted. Sally Engle Merry uses the term "indicators" to describe "quantifiable ways of assessing and comparing characteristics among groups, organizations, or nations."[44] Indicators depend on the construction of categories of measurement such as "ethnicity, gender, income, and more elaborated concepts such as national income." There is a power in indicators that produces and reproduces ideas about certain lives.

In calculating future lost income capacity, injury law engages in the practice of monetizing and placing value on the life of the injured individual. Productivity is the most apparent of such values, in that the calculation of future lost income capacity is indivisible from the question of worklife and productivity in the workforce. Further, the liability model itself sets up and economic model which attaches value to productivity. In my ethnographic research, this type of value system is apparent in all portions of the lawsuit procedure. We can see the process of commensuration, in which "different regimes of value, brought up against one another… became the subject of both conflict and complex mediation."[45] It becomes evident that through case law, settlement process, and the trial, productivity becomes equated with the value of the injury.[46]

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[44] Merry, Sally Engle. "Measuring the World: Indicators, Human Rights, and Global Governance." *Current Anthropology* 52, no. S3 (2011).
[45] Comaroff, Jean, and John L. Comaroff. "Beasts, Banknotes and the Colour of Money in Colonial South Africa." *ARD Archaeological Dialogues* 12, no. 02 (2005): 107.
[46] Marx, Karl (1867-1879) 1925-1926 *Capital: A Critique of Political Economy.* 3 vols.

In addition to productivity, there is a devaluation of marked bodies (where "marked bodies" means bodies that deviate from the norm of 'white-male'). In an examination of the quantitative data available on disparate award amounts as determined by the jury, the most striking feature of this data base is its lack of substantial work. Although there has been some research done that demonstrates the biases in award amounts based on certain physical markers, there is not enough.[47] Criminal law has been extensively studied and this study has produced compelling evidence that physical characteristics of a defendant often influences the jury to recommend harsher sentences. I argue that this analytical approach needs to be taken to evaluate civil law as well. It would be reasonable to suppose that if this type of devaluation of life appears in criminal cases, it may also pervade the civil realm.

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My chapters are organized according to the process of the law. In the first chapter, we are introduced to the experts that participate in the institution. The second chapter deals with the power of numbers and calculation in determining future lost income capacity. This procedure is most common in the settlement process. If a case does not settle it will go to court. The final chapter deals with the systems of value that present themselves in the arena of the courtroom.

In the first chapter we are introduced to a variety of experts. Chapter I examines how injury attorneys, defense attorneys, and forensic accountants assert

[47]Chamallas, Martha. "The Architecture of Bias: Deep Structures in Tort Law." *University of Pennsylvania Law Review* 146, no. 2 (1998): 463. The calculation by Martha Chamallas on tort judgments and settlements showed that in the aggregate, male plaintiffs received awards that were twenty-seven percent higher than those of female plaintiffs.

a moral and neutral stake by wearing various "masks of neutrality" which I identify as moral, the reasonable, and the dissociative masks. To understand the knowledge that the expert produces it is critical to understand how it is that the expert perceives himself. There is a common preoccupation with public perception, payment schedules, and objectivity. This self-perception is productive of a certain type of imagination. The expert engages in a practice of constructing his own identity and then subsequently constructing the identity of the injured. Particularly through the forensic accountants who are most committed to the idea that knowledge is impartial, we can see the tension between morality and knowledge come forward.

Chapter II is predominantly concerned with the settlement process. During settlement calculations and numbers are introduced to calculate the future lost income capacity of an injured individual. In determining future lost earning capacity worklife expectancy and average national wage are calculated taking into account race and gender, amongst other variables. The use of such variables result in disparate damage awards whereby some lives are worth less than others. This chapter deals with the power of numbers as an inarguable force and to transmute an individual's physical injury to an affectless calculation. The notion of objectivity is central to this discussion. Objectivity appears to be the ultimate goal for the experts, and particularly for the forensic accountants. Rivaling notions of what constitutes objective study are important to the understanding of the nature of the institution as reproductive of certain types of value schemas. I argue that objectivity acts as a condition of the reproduction of social and racial hierarchies.

Chapter III moves from the settlement process to the arena of the trial. Under ten percent of tort law cases make it to trial and in such instances the calculations of future lost income capacity are present but much less relevant to the jury decision. This chapter looks at the different values that come to affect the distribution of damages. Values such as productivity, "picket-fence" values, and marked-body values come to influence a jury. Through an examination of the 9/11 Victim's Compensation Fund in which the Special Master of the fund was successfully petitioned to void the use of race and gender in calculating award damages we can examine this site of the depreciation of marked values while simultaneously raising questions about [the lack of] activism.

**Fieldwork**

As a senior at Harvard University bound for law school in the fall, I decided to pursue a thesis that focused on the legal process while addressing an issue of great personal concern. This legal interest proved to be an excellent channel of access. I reached out to forty-five firms in total. I received affirmative responses from thirteen of fifteen injury attorneys, eight of fifteen defense attorneys, and eight of fifteen forensic accountants. It is interesting to note that about 87% of the injury attorneys agreed to participate as compared to about 53% of defense attorneys. Although this is a moderately small sample size, it could be attributed to a number of factors. The injury attorneys, through out the interview process often demonstrated that they were extremely eager to change their narrative. They impressed upon me that they were not "ambulance chasers" but rather public servants, serving the injured on a contingency fee. Defense attorneys on the other

hand seemed comfortable with their reputations, explaining how they protect companies and individuals from such a "ridiculously litigious population." This difference in response rate could also be attributed to their professional experiences. The defense attorney, all too familiar with being on the defensive side of the lawsuit, may be warier of situations of potential liability.

Because of my position as a student without the resources to travel around the United States to conduct interviews, I predominantly focused on the Boston area. At first concerned that this approach would yield only a handful of firms to choose from, this concern quickly proved unwarranted when the first Google search yielded over one hundred personal injury firms, sixty defense firms, and thirty forensic accounting firms in the Boston area. I randomly selected fifteen of each and emailed their Human Resources department. If I did not receive a response within a week I would call the front desk. Therefore, I only was in control of law firm selection, and not selection of specific informants. I would then be directed to a specific attorney or accountant to ask if they wished to participate. This is relevant because all of the informants I was referred to were white males. It was not that I reached out to only male informants, or that only male informants responded, but that I was directed to an entirely male population.

I performed most of my interviews at the office of the informant. A few times we ventured out of the office or conference room to a nearby coffee shop. I took extensive notes on the conversations by hand. The interviews were at first unstructured; I had a few questions to ask but for the most part I allowed the

informant to speak freely. Once I noticed that a few topics were appearing unprompted in the early interviews I began to incorporate them into my questions.

In addition to conducting interviews I did research into past court cases. Because civil cases are public record there existed a wealth of resources to be accessed. In order to identify such cases I used the LexisNexis Legal Research portal. This search tool allows the researcher to put specific key words into the search bar in order to yield relevant results. I searched combinations of terms such as "injury law, minor, child, race, gender, future lost income capacity." After reading through a variety of cases I chose those that were the richest in detail and most transparent in logic.

# Chapter I
# The Masks of Neutrality

*"Human behavior flows from three main sources: desire, emotion, and knowledge."*
—Plato

My informant looked uncomfortable. He adjusted his shiny blue tie with a single index finger by absently loosening the knot away from his throat. Mr. Anderson is a middle aged forensic accountant who works predominately on the side of the defense. Still, on occasion, he works on the side of the plaintiff so as not to be construed in the legal realm as "just a hired gun."

I repeated my question. "How is gender taken into account when determining future lost income?"

He cleared his throat for a second time. I was sharply aware that gender was sitting tightly and uncomfortably between us at the long conference room table. "I'm a democrat," he prefaced, raising his eyebrows. "I've gone to national conventions. I have seven sisters. I have a bias, in terms of my feeling about women. My father always said that women can do more than men can. He always said that women, *you* ladies, are more competent. My seven sisters really show that." He paused, satisfied by this extensive disclaimer. "That said, women absolutely make less on the dollar. This is an indisputable truth. So, logically, that should be reflected in the settlement, in the future lost earning capacity estimate. That's just how it is, so that's what I need to use. Right?"

The day before I had interviewed a forensic accountant who works predominantly for the plaintiff side in injury cases. When asked about gender in calculating future lost income capacity, he answered with authority. "I looked into that gender payment disparity that everyone is always going on about." He stated, before continuing.

> If you take the income of every woman and every man, these statistics don't take into account full time or part time work. It's an 'apples to oranges' comparison… You take two people, a man and a woman, and compare their salaries in the same industry. A male and a female firefighter? It's the same. That argument, that woman should receive a smaller settlement because they make less on the dollar? It's bullshit. I'm sorry to say, it's bullshit.

The two forensic accountants, while both relying on statistics and purportedly neutral and objective data, reveal competing evaluations of a woman's worth. The conversations with forensic accountants highlight the tensions between impartiality, objective expertise, and advocacy that arise in an adversarial system of justice. One the one hand the law depicts itself as neutral, attempting to generate truths on which to articulate claims, but on the other the adversarial system of advocacy puts this objective truth into question. This objectivity is problematized by the concept of the "hired gun." For the forensic accountant, being perceived as a "hired gun" ties to their neutrality. For the lawyer, hired explicitly as an advocate it is more difficult to maintain a moral position, yet they nonetheless see themselves as producing truths. Factuality, reason, and morality all work triangularly to solidify one another. They are related with each other through articulation, with each predicated on the other.

Most literature on the injury law focuses on the expert's monetary evaluation as a single data point. There has not been much research on the actors,

activities, and processes that ultimately produce the decisive award amount. Perhaps, this is because the interest has largely been confined to the "win/lose" binary of injury lawsuits. A study of the expert, I suggest, sheds light on how the uncomfortable process of valuing future income capacity comes to be institutionalized and perpetuated.

Within this chapter, I argue than in evaluating the experts who participate in the shaping of the decision, we can identify the moments of dissociation and rationalization in the disparate valuing of bodies. Here, I interview lawyers and forensic accountants. Conversations do not focus exclusively on the practice of determining future lost income capacity, but rather on how the expert views himself in regards to the work that he does and the environment in which he works. Payment schedule, industry reputation, and the ambivalent nature of expertise for hire come up consistently throughout the conversations.

Dominic Boyer proposes that to examine the expert we must look at him beyond the merely professional and epistemological realm. My work aligns with Boyer's definition of the expert as "as an actor who has developed skills in, semiotic-epistemic competence for, and attentional concern with, some sphere of practical activity".[48] In addition, Boyer recommends a movement away from the common perception of experts as rationalists. Instead, he writes that experts should not be treated "solely as rational(ist) creatures of expertise but rather as … human-subjects."[49] Whilst acknowledging this, I take a slightly different angle, that is to

[48] Boyer, Dominic. "Thinking through the Anthropology of Experts." *Anthropology in Action* 15, no. 2 (2008): 38-46.
[49] Ibid.

say I examine the various masks that the expert wears in order to affect a perceived neutrality, but this mask is constantly slipping. By mask, I mean stances that the expert assumes to both justify and reinforce his position, as well as to maintain his moral stake.

Annelise Riles writes that this "self-conscious image of legal technique is that it is neutral and agnostic as to its purposes and applications."[50] The hiring of impartial experts embodies this assumption of the purportedly politically neutral; He is basically a technician, performing an uncharged procedure. She continues, "It is only a tool, nothing more, and can be used by anyone anywhere for any purpose." This attempt to disengage technique from politics is central to my argument. The attorneys and accountants do not want to be seen as advocates or rhetoricians, but rather as making truth claims rooted in the law.

Governance, however, is "mediated through the technical legal knowledge."[51] This idea of the technical character of the law is broken down into "certain categories of experts-especially scholars, bureaucrats and practitioners who treat the law as a kind of tool or machine and who see themselves as modest but expertly devoted technicians." They create "a problem-solving paradigm… an orientation toward defining concrete, practical problems and toward crafting solutions." Law, for Riles, can be employed as a form of reasoning and argumentation."[52]

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[50] Riles, Annelise. *Collateral Knowledge: Legal Reasoning in the Global Financial Markets.* Chicago: University of Chicago Press, 2011, 67.
[51] Ibid.
[52] Riles, Annelise. *Collateral Knowledge: Legal Reasoning in the Global Financial Markets.* Chicago: University of Chicago Press, 2011

If one is a rhetorician or a "hired gun" then they are morally compromised. An examination of the experts who work in the realm of tort law evidences that there are consequences to perceived neutrality. As one attorney explained, "the profile of any expert is someone who may have been both sides, lets say an economist, who has worked with defense and for plaintiffs." This is important, he continued, so that it is clear that when the expert testifies, "he's done both sides. It won't just appear that he is just a 'hired gun.'" According to one defense attorney, at the end of the day, where future lost income is concerned, it's "a battle of expert testimony" that comes down to "is your expert better than their expert?"

In this study, the attorneys and accountants are examined not only in their practices and outcomes, but more importantly through their reasoning and justifications for the work that they do and the masks that they wear. How does an injury attorney view himself? How does the defense attorney justify the work that he does? My work extends beyond this examination of the expert in two critical ways. First, I identify that there can be no true separation between an expert's worklife and his larger identity, and in fact the expert takes on a variety of identities to maintain his moral stake. Further, my examination of the expert is not intended to be a study of only the expert, but how neutrality has implications for the institution of injury law.

I emphasize the important relationship between morality and argument that the actors must navigate in order to maintain their moral position while perform a designated role within an adversarial structure. How do the various players in the injury law case come to position themselves in relation to their work? Although

within this legal terrain the term 'expert' is use to refer primarily to forensic accountant, I use the term to refer to all of the major actors (injury attorneys, defense attorneys, and forensic accountants). I do so because they all try to articulate some form of reasonable argument; a domain of factuality and presumed normative moral stances in their production of expertise. This expertise is always presented as objective or neutral because of wider institutional emphasis in law on accountability, impartiality, and objectivity. In examining the various experts that participate in the determinations of future lost income capacity I hope to elucidate the complex relationship between knowledge and morality that influences the actors and subsequently the larger institution.

**Labor Value and Morality Amongst Attorneys**

For the injury and defense attorney, going to trial is both a daunting and exciting moment. There is an enormous degree of risk that the attorney takes when they walk into a courtroom to argue a case. With a jury and a judge and an array of witnesses, there is no way of predicting outcome. For the injury attorney this is even more high stakes. Paid on a contingency fee basis, the work that the attorney has done for the client up until trial has been unpaid. The injury attorney will receive thirty percent of the award that the client receives. The defense attorney, on the other hand, is paid by the hour. This differential is important in understanding the distinctions between these two types of attorneys and the way that they operate. According to most of the attorneys I interviewed, defense work is a "safer" industry in that salaries are high and stable. You are paid by the hour and can expect to make

a certain amount each year. For the injury attorney, there is an element of uncertainty. They often make, "smaller salaries but bigger bonuses."

From this difference, the injury attorney comes to see himself as starkly different from the defense attorney. This was illustrated most vividly in my first interview with an injury attorney. When I arrived for this first interview, I was immediately struck by Mr. Martino's confidence. He spoke deliberately and in such a convincing tone that I felt myself nodding along as he spoke. Mr. Martino has been an injury attorney for twenty-three years and when asked to identify the most challenging part of his profession he responded with assertion. "The defense lawyers only make money when the case goes into litigation and you argue for two years, you end up wasting time." He continued, "Believe it or not, sometimes you shouldn't spend two years in litigation, you should say 'yeah, it's our fault.' We work on what's known as a contingency fee. We get paid if we are successful. We bet on ourselves. So you can see the conflict… we are not getting paid, we don't want cases to go on for two or three years because we aren't making money. The defense lawyers only get paid by the hour. They want to drag things out. So we have a conundrum." Despite this frustration, he expressed only positive sentiment about contingency work.

> It's a wonderful thing, we are betting on ourselves. That makes me comfortable. More importantly, it gives regular people access to great attorneys because they don't have to pay for it. So a gas station attendant has a real case, and a guy said to him 'it'll be ten thousand dollars at eight hundred dollars an hour for me to be on retainer and I'll send you monthly bills' what normal person could pay that? Who has that kind of money lying around? So you'd have a situation where needy, regular people in need of good legal services can't afford good lawyers. The contingency fee levels the playing field.

Mr. Martino takes pride in serving the injured, as a form of public service. He sees this type of contingency work as a way of serving those who would be unable to put forward a case due to a lack of initial capital. Defense lawyers on the other hand, according to Mr. Martino, use the case as a chance to "waste time" because they are being paid by the hour.

Defense attorneys, however, view contingency work as part of a larger litigious culture. They use words such as "frivolous" or "ambulance chasers" and described the contingency work of the injury attorneys as a way to try to get the most money out of any situation. As one defense attorney explained to me, "we get paid by the hour. What that means is that no matter how large the settlement award, we make the same thing. Yeah we might get a bonus or something, but ultimately our payment is decided before we arrive at the final decision. He smiled knowingly before continuing, "imagine this, you're married to an injury attorney. Ok?" I nodded so that he would continue.

> So your husband is an injury attorney, and he's been working on a case for a while. He hasn't been paid yet! You can imagine that you're not too pleased with this. Neither is he. So he is incentivized to make this injury sound much more severe than in actually is. He needs this injury to be as bad as possible. You understand? That is not a recipe for a reasonable claim. Defense attorneys on the other hand, have a stable and consistent income. My wife is going to know exactly how much money we will have in the bank account at the end of fiscal year. I am not put in a position of desperation. Therefore, the award amount I am fighting for will be much more reasonable and suitable to the injury. You see?

Mr. Danton, a defense attorney, expressed that he found himself to be a defender of small businesses and the "economy that makes America such a wonderful place." Mr. Danton's firm typically represents insurance companies in automobile accident suits in Massachusetts. "What people are beginning to

understand is that by giving an injured person a large and unnecessary settlement, you aren't just punishing big businesses. Certainly, don't get me wrong, and you can write this down, some accident victims are entitled to receive monetary damages for their injuries. But more often than not, they are bad faith claims. This is really an issue for everyone." He leaned in dramatically. "Bath faith claims? They are bad for you, for your parents, for your boyfriend. The demand for high payout settlements contributes to higher insurance premiums for everybody. Everyone you care about! Your parents and your boyfriend too, you understand?"

The attorneys I interviewed not only situate themselves in relation to their payment schedule, but also seem overtly concerned with public perception. Public perception perhaps explains why injury attorneys were exceedingly eager to participate in interviews. They are unhappy with the prevailing narrative immoralizing their industry, and welcome the opportunity to defend their moral position. Alternatively, defense attorneys are satisfied with the public perception of the industry and may not feel the same desire to participate in an interview to share "their side" of the story.

Americans are often criticized, both domestically and abroad, for existing within a "compensation culture." Sometimes, we are made aware of this industry through a television commercial soliciting injured parties to come forward. Other times, it is a particular case that is well publicized: none more famous than the 1994 McDonald's coffee case in which 79-year-old Stella Liebeck was awarded 2.7 million dollars after spilling hot McDonald's coffee in her lap. She received widespread media attention condemning such "frivolous" and "inappropriate"

action, and her story and others like it filter into popular culture.[53] In a recent episode of the well known television show, Parks and Recreation, a character notes that he became wealthy "the old fashioned way" because he had been "hit by a Lexus." He recommends that his friend do the same: "I know a guy if you're interested. Minor scrapes and bruises. Major dollars and cents."[54]

Unprompted, the first five attorneys interviewed mentioned the same case, the McDonald's coffee case. As I began to understand its significance to both the defense and injury attorneys I began to work it into my interview questions. For the injury attorneys, attempting to dispel a narrative of frivolous behavior, and replace it with one of public service, this case was not just infuriating, but constantly referred to as "the most misunderstood case there is." For the defense attorneys, this case was a validation that they were on the right side of the law. It allows them to justify the valuing of bodies that they participate in, reinforcing the idea, as one defense attorney exclaimed, that people "milk an injury for all that it is worth and then some!" The reactions to this case serve an important function in evaluating the way that they situate the work that he/she does in the larger picture.

When I asked an injury attorney if I could ask him about a popularized case in the media, he quickly interrupted.

"The McDonald's Coffee Case?"

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[53] Schudson, Michael. ""The Sociological Imagination" as Cliché: Perils of Sociology and Practices of Journalism." *Int J Polit Cult Soc International Journal of Politics, Culture, and Society* 20, no. 1-4 (2008); Mei, T. S. "Insurance in Between: A Critique of Liability Insurance and Its Principles." *Literature and Theology* 21, no. 1 (2007): 82-98.

[54] *Parks and Recreation*. "Li'l Sebastian." Season Three, Episode 16. Directed by Dean Holland. Written by Daniel J. Goor. NBC, May 2011.

His tone changed dramatically. He lowered his voice, and spoke slowly. "That case? That case is the most misunderstood case there is. I'm going to tell you the truth and you might not like it." The attorney painted a vivid picture, claiming that corporations and the insurance industry "love cases like the McDonald's Coffee Case because they can spin it." This is a strategy, since "every dollar a jury doesn't give to the plaintiff is a dollar for the insurance company or the corporation." He did not attempt to hide his anger and frustration; "It's really misleading and abhorrent what they're doing. Imagine this…" he began to paint a vivid picture.

> A seventy-five-year-old woman goes through the drive through and orders a coffee. They give it to her and they say, 'look you can't grab it from the sides cause its too hot. You have to grab it by the top'. So she takes it from the top and puts it between her legs for a moment. It winds up spilling on her vagina. She has third degree burns on her vagina. She has to have skin grafts where they take skin from her hips in rectangular patches and graft it onto her vagina. I used to have a picture on my phone of her vagina and inner thighs after she was burned. And it is horrendous. No cup of coffee should ever do what this did. It went through her skin into her fascia. She asked that McDonald's pay her medical expenses, which back then, was just twenty thousand dollars. That's all she wanted. McDonald's refused. So she sued them.

This was a speech he had presumably given before, and if not, that he had wanted a platform to give for some time.

> The lawyer did discovery and found many other instances of people getting burned by the coffee. Most of them were McDonald's employees. They got burned because it was so hot that they couldn't hold the cups by the sides. They would drop the cup and then get burned. So there is an internal memo that says, 'all these people are getting burned, what do you want to do?' and McDonald's responds in a memo to all its franchisees, 'keep brewing the coffee at 184 degrees because it stays fresher longer.' So they know people are getting burned and know that their employees are in danger. And they say keep doing it because we save money by doing it. The jury hears all this, and they find for the plaintiff, and they ask 'how much does McDonald's make on coffee sales in a day.' And then they doubled it. They

> said we are going to give her that amount… *Two days worth of coffee sales.* The judge reduced it, he thought it was too much. He reduced it to 660,000 dollars.

After describing the case in such vivid detail, he took a moment to describe the consequences.

> That's the McDonald's coffee case. It has been taken by the insurance industry and by defendants to say 'we are out of control as a country' and then things like 'I would spill coffee on myself to make that much money!' They think we are out of control and a litigious society. They don't know the truth. So any time I hear someone talking about the McDonald's coffee case, whether it be at Walmart or the Supermarket I take the opportunity to tell them. And I used to take that picture with me to show them. And people would almost throw up looking at it, how bad it was! And by the way, this worked perfectly in Massachusetts because jury verdicts are way down.

In each of five other interviews with injury attorneys they brought up this same case, sighing that "it's the most misunderstood case there is" or "that case is pure propaganda." Others reacted with even more anger, describing to me in great detail exactly how this case was spun to squash injured parties everywhere. So intense were the feelings surrounding this particular case that multiple attorneys looked over at my notepad and instructed me "to be sure to get this part down."

Alternatively, defense attorneys brought up this case as support for their position that the injury attorneys have become "out of control" as an industry. They presented the case extremely differently. An insurance defense attorney most explicitly expressed this in a coffee shop interview across the street from his firm. He explained, "this was an old lady, right? Kind of fragile already, she was like eighty-five years old. So she goes to McDonald's, orders a coffee in the drive through, and spills it on her lap. She's old, so the burns don't heal that well." He paused, "maybe she was wearing shorts or something." He chuckled at his own joke

before continuing. “So yeah, she gets burned, and I’m sure it hurt. But the jury gave her like three million dollars. Hell, I’ll spill coffee on my lap for that amount. Actually, I’d do it for half that amount, wouldn’t you?” He prodded me for an answer, and I mumbled an “I guess…” reluctant to disrupt his response. He continued with increased enthusiasm. “That’s the problem these days. People will sue for anything. It’s bad for business, it’s bad for the government.”

The disparities in such accounts are important to note. However slight, the differences in the narratives are important in understanding both the process of valuing the lives of the injured and how the expert situates himself in the realm of moral opinion. The defense attorney accounts that Ms. Liebeck was “fragile” and used the word “old” multiple times. He adds seven years to the victim’s age. He jokes that she may have been wearing shorts as an old woman, shifting the blame and locus of control from McDonald’s to Ms. Liebeck. He prods me to agree that I would undergo the same injury for that amount of money.

On the other hand, the injury attorneys attempted to make the degree of the burn clear. In the account by the injury attorney, he used the word “vagina” five times, as if attempting to encourage me, as a woman, to empathize with the horror Ms. Leibeck underwent. He attempts to move the injury back to the site of the physical. Interestingly, he underestimated her age. He situated the eventual award in terms of McDonald’s coffee profits, attempting to convey the number as reasonable. He discussed the extensive history of similar burns and McDonald’s lack of action, hoping that the case will be understood not as an individual instant, but as a culmination of chronic negligence on the part of McDonald’s.

**Evaluating Injury**

When asked about the calculation of future lost income capacity, some attorneys were more reluctant than others to discuss the specifics of the procedure. When I asked one injury attorney about the calculation process he seemed to gravitate towards the discussion of the courtroom. The settlement process and the trial process, he explained, required different techniques. "You use statistics and equations in both settlements and trials, but the methods employed by the defense would not work as well in a trial environment as it would with an adjuster in a closed settlement conversation." He explained that the jury was unpredictable. "Surely, at trial you have a jury that you might know about. You have the questionnaires. You know about their backgrounds to some extent." This is an advantage, he explained, because "as the trial evolves, depending on how long it takes, you get a sense for what the jury thinks. Some of this is just guesswork, but you can sort of tell if your theory is being accepted." Because of this, in the space of a trial you might not be as willing to employ numbers, as it might "rub the jury the wrong way." Both sides, the plaintiff and the defense, he explained, will take a few estimates of the future lost income capacity of the injured individual. "We usually first take a conservative one since it is easier to defend. We might take different factors into consideration, we might not." He expanded a bit on such factors when I asked him to expand. "Factors might be race, family status… you know. You can track a certain type of person. You can find that their expected income is thirty percent of an upper middle class white male's who has grown up in a house with two parents. The defense uses this kind of information all the time."

He paused, before continuing, “I guess we do too, but when we do it it’s different. It’s to help someone become whole again.”

My conversations with defense attorneys were more consistent both in physical offices as well as in the tone of the interviews. They seemed more guarded, more pressed for time, and detailed answers were much more difficult to come by. The injury attorneys seemed eager to talk for as long as possible. Often, I was the one who found myself clearing my throat and asking for ‘any last thoughts.’ With the defense attorneys, a thirty-minute slot began to feel extremely generous, perhaps because they bill by the hour as opposed to by the result. I learned quickly that I needed to begin such interviews with questions such as “what is the most difficult part of being a defense attorney?” One response to this question dealt with the jury. “Sometimes” he said seriously,

> you can suffer from ‘trial-psychosis’ where you so believe your case that when evaluating your argument, you don’t have a sense for it because you think you have an answer for everything. Because you have gone to the accident scene, you’ve watched it. But the jury isn’t going to do that. They wont have that same insight! And so really, it’s a risk analysis. We, defending the insurance company do it, and they do it on theirs. It comes down to whether or not you should settle or roll the dice and go to trial, and ‘trial psychosis’ sometimes makes it difficult to imagine that anyone might not follow your line of logic.

**Forensic Accountant**

Public perception, and hence moral opinion, clearly important to the attorneys, is also an issue important to the forensic accountant. Each accountant I spoke with professed a desire to be seen as objective and not as a “hired gun”. They each discussed why they were of the “good” type of expert, not the type that was hired to win a case. In hiring experts, one defense attorney explained, you want to

get “the most qualified” expert that has worked on both sides, as “lousy experts” tend to “only work for defendants or vice versa.” Referring to those “lousy experts”, he chuckled, “you could loose your arm and they might say ‘well here is why you’re better off.’ They know who butters their bread. They give opinions that they shouldn’t give. They are using expertise to argue.”

Prior to my exposure to this topic, I was unaware that forensic accounting was such a large industry. Without this knowledge, I was not sure of what to expect of my first interview with a forensic accountant. It was 2:50 PM and I felt out of place walking down the street in my grey T-shirt and backpack. I momentarily kicked myself for not having gone back and changed for the interview. When I walked up to the building, I recognized that I was, as I had feared, tragically underdressed. When I had arranged to meet my informant at his accounting firm I had pictured an office full of disorganized cubicles and lots of khakis. Walking up the marble steps and pushing through the heavy opaque glass doors I was immediately struck by the interior. Three receptionists smiled at me as I signed the “guest sign in form.”

I introduced myself to the receptionist at the front desk. She directed me to take a seat and handed me “some promo material to look at” while I waited. On the front of the packet it said, “Making Numbers Make Sense.” Inside in large bold red and black letters across the page read:

> **ECONOMIC DAMAGE QUANTIFICATION (EDQ):** The practice of measuring, in financial terms, the value of harm or injury that has been inflicted on a person or property.

Engrossed in the "promo material" I startled when the accountant called my name. "Leah, do you want to do this in my office? Or go down to the coffee shop? I have a couple of things to finish up, so follow me back to the office." I gathered my belongings and followed. He was an older man, standing tall at around 6'3. A teal pocket square protruded from the pocket of his navy pinstriped suit. His black hair was gelled so flatly to his head that it was impossible to imagine that a stubborn stray hair could ever emerge victorious. "By the way, despite how it may appear, I know where everything in my office is."

His office was large, but without much room for movement. Large panes of glass on two sides of the corner office allowed for fantastic panoramic views of the Boston. Red Sox paraphernalia covered every part of the wall that was not covered with framed diplomas and certificates. Faded photos of his two sons lined the windowsills, bleached with sun and time. On every surface sat piles of charts and graphs that threatened to topple over at any moment. After a moment he exclaimed that we would be going to the coffee shop "to get a change of scenery."

We took a corner table in the coffee shop and I pulled out my notepad. The coffee shop was bustling with business people getting their afternoon caffeine fix. He leaned towards me as he spoke, and began to paint the picture of his role in injury law cases. "Basically" he began,

> I work for both sides, but mostly on the defense. We provide litigation services and expert testimony in courts, arbitrations and mediations across the world. We deal with practice areas like damages quantification, valuation maters, construction litigation, and fraud investigations. I know you are mostly interested in injury law, right? Attorneys often are able to work with medical expense and mortality themselves, but they might come to a firm like ours for calculations of future lost income or future lost income capacity.

The process by which a firm comes to hire a forensic accountant is relatively standard, Mr. Thomas explained. The attorney calls the accountant, describes the circumstances, and hires the accountant to be on retainer. The accountant never meets the victim of the injury. Instead, he is given answers to a number of "interrogatories" including age, education, occupation, medical history, race, and anything else. The more information the better. When hired by the defense, Mr. Thomas prefers to be also given a copy of the plaintiff's expert report to review "areas where they are overzealous."

"Attorneys just want ammunition." He smiled, "you know, to negotiate. To negotiate what is reasonable. We come up with an independent report." Mr. Thomas has testified in court "between thirty and forty times." When I remarked that he must be quite used to giving expert testimony by now, he leaned back in his chair. "Well, that's sort of the reason I've stayed in this business. Every case is different. Absolutely you have to be a good accountant first. But then, you really have to have forensic skills. You have to be analytical! Have street smarts! You can't accept things at face value. You have to drill down, evaluate, and question." He momentarily stared off at the barista frothing a customer's milk behind the counter. "I've been doing this for 35 years, and honestly, outcomes are still unpredictable." He sighed. "I've had cases that I thought were slam dunks and then we ended up losing. Any time you go to court, you run the risk. I've had my butt kicked. The time I'm thinking of the issue was in the composition of the jury. Some attorneys are extremely persuasive. They know how to connect with jurors."

Startled by the "win/lose" language he was employing, I may have come off as more aggressive than I intended when I asked, "but how can you personally win or lose if you are just there to testify?"

"Well, you know what I mean. Did you want to get a coffee by the way? I forgot to ask you!" He was still smiling, but I could tell that this line of questioning was over. He was sitting at the edge of his seat now and glanced down at his watch every few minutes. Feeling that the conversation was wrapping up, I asked about the use of gender in making these determinations. "Listen. We have been and always will be gender specific. There are discrepancies. That's just the truth and we can debate the situation but at the end of the day women are absolutely paid less on the dollar. Maybe someday we will get there, but until then, while women have unequal pay, we must take it into account. Can I recommend to you a book? Martin's "Determining Damages"? It's a great manual that really delves into this whole process." He stood up and shook my hand firmly. "Put my name in this thesis and send it to me when you're done! I can't wait to read it. I'll send it along to my sons as well! You call me with any questions, you hear?" I thanked him profusely.

**The Masks of Neutrality**

The identities of the lawyers and the forensic accountants are steeped with contradictions. For the attorney, operating in the realm of the justice system but hired to win, he must find a way to justify his work morally within his own imaginary and agenda. For the forensic accountant, operating in the almost oxymoronic realm of hired neutrality he must square the objective to win with his supposed impartial expertise.

An examination of the actors who engage intimately with cases of injury and the subsequent valuation of future lost income capacity presents a meaningful understanding of the institution as a whole. Forensic accountants, injury attorneys, and defense attorneys all situate themselves and justify their roles differently, but in all cases aspire to a neutral evaluation of life grounded by moral values. They justify this morality by emphasizing that they are arguing rationally, that is they strive to bring in morality, reason, and factuality. However, this is rapidly complicated by factors of payment, public perception, and the adversarial structure of the law suit. These complicating features producing a need for each to stake a moral claim. To understand the knowledge that the expert produces it is critical to understand how it is that the expert perceives himself. This self-perception is productive of a certain type of imagination. The expert engages in a practice of constructing their own identity and then subsequently constructing the identity of the injured. They advocate but do not want to acknowledge this position. Therefore, it becomes important to extend the evaluation from purely a question of how the expert situates himself within his area of expertise to a question of how the expert masks his position as an advocate within a space of truth claims grounded in neutrality.

Here I demonstrate how experts come to construct certain masks of neutrality and embody particular modes of justification, method, and goals. They occupy stances of the moral, the reasonable, and the dissociated. The forensic accountant is the most evident expert to examine this production because they

embody the conflict between morality and argument most explicitly through the preoccupation with being perceived as a "hired gun."

The moral mask allows the expert to situate himself in a position of seeking retribution for the injured party, becoming closely affiliated with the injured body and the consequences of such injury. This mask most closely aligns with the perspective that the purpose of injury law is compensatory justice. From the injury attorney arguing on behalf of injured bodies we are constantly reminded not only of the injuries but of the injured bodies themselves. In his emotive description of the McDonald's coffee case, an injury attorney described the burn in graphic detail. He offered to look up a photo on his computer to show me the extent of the injury. The bearer of the moral constantly connects the individual to his injury, to his disability, to his future, to his family. In this way, he also confirms his identity as an advocate, justifying his narrative.

When wearing the reasonable mask the expert attempts to identify the space of advocacy and the space of reason, yet then a dismissal of the first space in favor of the latter. This mask of neutrality allows the expert to maintain his[55] moral position by, although recognizing the injury of the individual, ultimately resulting in an appeal to the aggregate in affirmation of his reasonable impartiality. We see this in actors such as the forensic accountant who professes that he has seven sisters and that he personally believes women "are more competent" but then ultimately find the larger inarguable truth that women make less on the dollar, so "logically" they must be treated as such. The wearer of the reasonable mask removes himself

[55] Note that I use "his, him, he" to describe the expert. This is because every expert I interviewed was male.

from his own sense of truth or reality and evokes data and statistics to come to a conclusion. This is perhaps the most evident space of ambivalence. He employs "but, yet…" language to acknowledge humanity 'but' then ultimately justify a level of dissociation from the individual to fall back on statistics, data, and normalcy. This mask is perhaps the most representative of the larger contradiction of tort law which exists at the complex juncture of justice, the human body, and economy. Lawyers and these forensic accountants exist within a wider structure of 'neutral and impartial' law, but this is complicated on the ground through its adversarial structure.

Finally, the dissociated mask is that which allows the expert to remove himself completely from the realm of advocacy. The expert wearing this mask attempts to remove himself from the injury entirely. In Boyer's analysis of the expert, he notes that the expert "distances himself from corporeality." In this case the expert does this by concluding numbers to be more accurate measures of the individual than the individual himself. In this space, the actor can fully embrace his identity as a "neutral" technician. This mask is more often achieved by forensic accountants than attorneys. It is more believable that the forensic accountant can embody impartiality and neutrality though technical application of statistics than the notion that the same can be accomplished by the attorney.

These seeming masks of neutrality that the experts don tactically at distinct moments are critical to understanding the conflict between morality and knowledge experienced by the actors. His working existence comes to embody that which exists outside of his office. His working existence often reflects his family, his

concerns about public and social reputation, and issues of moral identity. However, this distancing is not constant, but rather volatile and wavering. These stances are ephemeral, and the expert constantly interacts with both his own humanity as well as that of the injured. Particularly through examples of injury involving children, we see this "back and forth" between the physical human and the mechanical technician.

# Chapter II:
# Numbers and Objectivity

*"Now that the 'disinterested' are praised so widely, one has, perhaps not without some danger, to become conscious of what it is these people are really interested in."*

— Nietzsche, 1886

"Miss Heym was a promising 19-year-old commercial art student who intended after graduation to enter upon a career as a commercial artist. On this basis, the witness assumed her future employment as a successful commercial artist working continuously until normal retirement age, and he calculated loss of future earnings accordingly. However, the district court, taking into account evidence of Miss Heym's temperament and personality, deemed it probable that she would have married and borne children, with consequent substantial interruptions of gainful employment." In *Frankel v. United States,* a 1975 injury case, there were no qualms in projecting such unabashed reference to a woman's "temperament and personality" to project future employment. Miss Heym would surely choose to marry and take time to care for her children, which would influence her earning capacity and worklife expectancy.[56]

Today this sort of statement would most likely provoke outrage. Despite this, the influence of race and gender on the calculation of lost earning capacity

[56] *Frankel v. United States* (321 F.Supp. 1331 1970): Alvin H. Frankel, Guardian of the Estate of Marilyn Heym, an incompetent, and Herbert Heym and Mary Heym, his wife, Plaintiffs, v. United States of America, Defendant. Alvin H. Frankel, Guardian of the Estate of Marilyn Heym, an incompetent, Plaintiff, v. Mary Heym, Defendant, Third Party Plaintiff, v. United States of America, Third Party Defendant. United States District Court, E. D. Pennsylvania. December 30, 1970.

endures, less visibly but perhaps more disquietingly, through numbers.[57] Charts and equations state the realities of difference in inarguable typeface. This chapter examines the process by which and the extent to which numbers are utilized in the calculation of future lost income capacity in cases of injury. I then consider the deployment of numbers as a tool of argument. This approach notes the particular ability of statistics and data to transmute physical injury to affectless calculation. Objectivity appears to be the ultimate goal for the experts, and particularly for the forensic accountants. Despite this commonality, there are rivaling notions of what constitutes objective study. Through interviews with experts, I discover that this transmutation is oftentimes enabled by concepts of objectivity. I argue that this concept of objectivity acts as a condition for the reproduction of social and racial hierarchies.

**The Use of Numbers: Extent and Process**

An injury lawsuit is decided either by settlement or trial. Over ninety percent of tort cases settle rather than go to trial. The Second Restatement of Torts addresses the use of statistical tables in calculating damages stating, "[i]n the case of permanent injuries or injuries causing death, it is necessary, in order to ascertain the damages, to determine the expectancy of the injured person's life at the time of

[57] *Vincent by Vincent v. Johnson* (833 S.W.2d 859, 865 Mo. 1992): "[t]his Court will not consider it error for a jury to refuse to minimize an award of lost minimum wages for an infant female on the assumption that the average wage for women in the future will still be only two-thirds of the average wage for men"); *See United States v. Bedonie* (317 F. Supp. 2d at 1316): Where the plaintiff was a Native American male, the government argued that: "the economic data relied upon in [the expert's] first report accurately reflects economic reality and the role that race and gender play in earnings today. As much as we wish that the average earning potential of all groups could be equal, the data relied upon by economists in calculating lost earnings show that, on average, whites earn more than Native Americans and men have a longer expected work life than women. These are relevant facts in determining the victims' actual losses."

the tort. For this purpose it is permissible to use mortality tables and other evidence as to the average expectancy of a large number of persons." [58] This essentially permits the use of aggregate data in determining the future of an individual. The restatement continues, "in determining the size of the award, it is agreed generally that the finder of fact may consider plaintiff's loss of learning ability, loss of future earning capacity, work life expectancy, age, life expectancy, investment income, inflation, predictable productivity increase, prospects for rehabilitation, and probable future earning capacity."[59] Such a framing reinforces the use of expert testimony. It demands actuarial models in determining award amounts based upon statistical calculations of the effects of certain characteristics of the injured person.

Many of the forensic accountants recommended that I read *Determining Economic Damages* by Gerald Martin. This work, lauded as the most comprehensive and heavily utilized resource, has over fifty pages dedicated to the issue of the minor or child plaintiff with "no employment history that would act as a basis for forecasting future losses."[60] Martin addresses the difficulty of estimating the earning capacity of a minor or child plaintiff with a lack of employment history. This issue, he writes, is solved by a methodology that "estimates the probability of a child reaching a certain educational level based on individual family demographic variables… The economist no longer has to guess whether the minor plaintiff will

[58] Restatement (Second) of Torts § 934A (Am. Law Inst. 1965).
[59] Ibid.
[60] Martin, Gerald. *Determining Economic Damages*. Santa Ana, CA: James Publishing, Inc. 2002. Page 206

graduate high school or attend college. Instead the probability of the child attaining a certain educational level can be calculating using actual family characteristics."[61]

In calculating an award estimate three major pillars are addressed. These pillars are life expectancy, worklife expectancy, and average national wage.[62] The two latter pillars are the most relevant in the calculation of future lost income capacity. Worklife expectancy is "the average number of years that a person in a given cohort will spend either working or actively looking for work during the remainder of his or her life."[63] Determining the worklife expectancy of the injured individual is critical in the calculation of the plaintiff's loss of future earning capacity. In the United States, where there is no mandatory retirement age, experts base their calculations on the results of labor market analysis. Worklife expectancy tables provide the initial foundation for calculating future lost income capacity. Based upon characteristics of the injured individual both sides can present information and evidence that would affect statistical worklife expectancy.

Experts rely on a variety of worklife tables, but commonly accepted in court and during the settlement process are tables that have been published in economic journals as well as put forth by the Bureau of Labor Statistics. Notably, the most

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[61] Martin, Gerald, *Determining Economic Damages*, Santa Ana, CA: James Publishing, Inc., 2002. Section 324.1

[62] In addition to these pillars experts may take into account salary growth rate, nonmarket lost, and may adjust for taxes, inflation, and individual consumption. T.L. "Smith" Boykin III, *The Economist's New Clothes* (2011); These areas however are far too technical to be discussed here, and do not add substantially to the analysis. The determination of life expectancy would be more relevant to a discussion of the calculation of future medical expenses and the worth of future pain and suffering in that these pillars are related to how many years of life the individual presumably has after the injury takes place. This is less relevant when determining future lost income capacity, as an individual does not usually work for the entirety of their remaining years. Therefore, this element of calculating awards will not be addressed here.

[63] Edward, Foster M. and Gary R. Skoog. "The Markov Assumption for Worklife Expectancy" J*ournal of Forensic Economics* 17(2), 2004, pp.167-183 2005

commonly referenced data produced by the Bureau of Labor Statistics was collected and compiled in 1986, rendering it out of date.[64] Although the Bureau of Labor Statistics stopped creating such worklife tables after the 1986 version "it has made the underlying data available to private researchers" so that economists who "prefer to use the older sets of tables" may obtain a copy.[65] Updated models have therefore only been produced by private researchers and forensic accountants.[66] Of the most commonly used is the Markov Worklife Expectancy model (Appendix B). There is no requirement dictating choice of table and forensic accountants may reference whichever tables they see fit in calculating future lost income capacity. An example of a commonly used life table that is then input as data points into the Markov Worklife Expectancy Model can be found in Appendix C.

When calculating future lost income capacity, average national wage is an area of calculation that is heavily affected when race and gender are factored into the equation. The average wage predicted using the data on race and gender (amongst other variables such as parental educational attainment) will be multiplied by the number of years that the child is predicted to work in his/her lifetime in order to calculate future lost income capacity. To determine this average wage, courts

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[64] "Worklife Estimates: Effects of Race And Education" *U.S. Dept. Of Labor Bureau of Labor Statistics, Bulletin 2254*: (1986)

[65] Martin, Gerald, *Determining Economic Damages*, Santa Ana, CA: James Publishing, Inc., 2002. Page 206 page 435

[66] The BLS 1986 tables were those most commonly referenced by the economists as reliable and accurate sources of information. The other models commonly discussed by forensic accountants when referencing the calculation of future lost income capacity for minor plaintiffs are listed here so that any interested reader may find a copy: James Ciecka, Thomas Donley, and Jerry Goldman. "A Markov Process Model of Work-Life Expectancies Based on Labor Market Activity in 1992-93," *Journal of Legal Economics*, Vol. 5, No. 3, Winter 1995; Daniel Millimet, Michael Nieswiadomy, Hang Ryu and Daniel Slottje. "Estimating Worklife Expectancy: An Econometric Approach," *Journal of Econometrics*, 113. (2003) ; Tamorah Hunt, Joyce Pickersgill, and Herbert Rutemiller. "Median Years to Retirement and Worklife Expectancy for the Civilian U.S. Population", *Journal of Forensic Economics Vol.* X, No. 2 (1997)

will often rely on wage tables. Below you will find a figure depicting "median usual weekly earnings of full time wages and salary workers" often used by forensic accountants.[67]

Median usual weekly earnings of full-time wage and salary workers by age, race, Hispanic or Latino ethnicity, and sex, fourth quarter 2005 averages, not seasonally adjusted.

| | Total | | Men | | Women | |
|---|---|---|---|---|---|---|
| | Number of Workers (in 1,000s) | Median weekly earnings | Number of Workers (in 1,000s) | Median Weekly Earnings | Number of Workers (in 1,000s) | Median Weekly Earnings |
| Total | # | $ | # | $ | # | $ |
| 25 years and over | 93,661 | 704 | 52,733 | 778 | 40,928 | 614 |
| 25 to 54 years | 78,458 | 697 | 44,476 | 771 | 33,982 | 610 |
| White | | | | | | |
| 25 years and over | 75,907 | 728 | 43,727 | 804 | 32,180 | 630 |
| 25 to 54 years | 63,053 | 724 | 36,631 | 798 | 26,422 | 625 |
| Black or African American | | | | | | |
| 25 years and over | 11,150 | 571 | 5,236 | 604 | 5,914 | 530 |
| 25 to 54 years | 9,693 | 566 | 4,588 | 601 | 5,105 | 528 |
| Asian | | | | | | |
| 25 years and over | 4,483 | 808 | 2,572 | 904 | 1,911 | 696 |
| 25 to 54 years | 3,830 | 814 | 2,198 | 921 | 1,631 | 686 |
| Hispanic or Latino | | | | | | |
| 25 years and over | 12,764 | 503 | 8,129 | 522 | 4,635 | 461 |
| 25 to 54 years | 11,581 | 502 | 7,399 | 522 | 4,182 | 461 |

NOTE: Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Beginning in January 2004, data reflect revised population controls used in the household survey.

http://stats.bls.gov/news.release/wkyeng.t02.htm

(Rev. 23, 8/11)

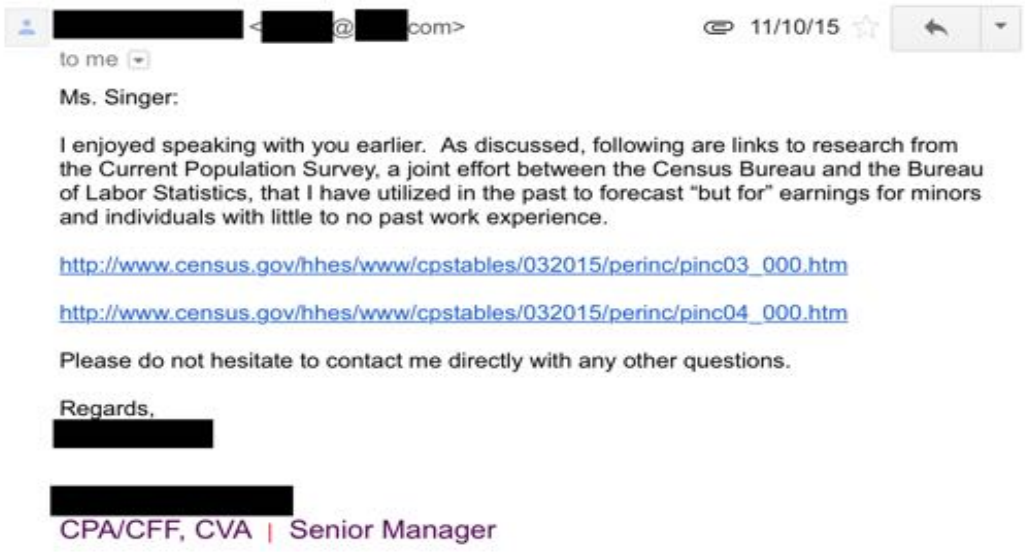
**Figure 1:** *Median weekly earnings of full time wage and salary workers, found in the 2011 addition of Determining Economic Damages. The numbers are taken from data published by the Bureau of Life Statistics.*

Using the above table depicting the median incomes for racial groups further divided by gender we can return to the case of Carmen, the young black female child injured on the playground.[68] We can imagine the discussion of her predicted median income of 461 dollars a week. This is only 73% of what her white

[67] Martin, Gerald, *Determining Economic Damages*, Santa Ana, CA: James Publishing, Inc., 2002. Page 204
[68] Ibid.

male counterpart would have been predicted to make.[69]

The experts I interviewed were very upfront about the methods they use to calculate future lost income capacity. Although avoiding specific names or indicators to maintain attorney client privilege, I was confronted with surprising levels of openness to my inquiries. A few accountants even made contact after the interview in order to send me useful documents and charts, as evidenced in the below screenshot of an email from a forensic accountant:


[redacted] <[redacted]@[redacted]com> 11/10/15

to me

Ms. Singer:

I enjoyed speaking with you earlier. As discussed, following are links to research from the Current Population Survey, a joint effort between the Census Bureau and the Bureau of Labor Statistics, that I have utilized in the past to forecast "but for" earnings for minors and individuals with little to no past work experience.

http://www.census.gov/hhes/www/cpstables/032015/perinc/pinc03_000.htm

http://www.census.gov/hhes/www/cpstables/032015/perinc/pinc04_000.htm

Please do not hesitate to contact me directly with any other questions.

Regards,

[redacted]

[redacted]

CPA/CFF, CVA | Senior Manager

**Figure 2:** *An email from a forensic accountant directs me towards his commonly used resources in the calculation of future lost earning capacity in the case of injury to minors.*

The attorneys are aware of the techniques employed by the forensic accountant. As one attorney explained to me, the expert you hire "will use a lot of government data, tables, books, and they are going to put together a report for you. They will project it out into the future and turn it to present day cash value. The defense is going to have their own expert, their own economist, who's going to say

[69] Full worklife and income tables by race and gender can be found in Appendix A.

'I disagree.' They will show a different number for what that person would have made. That's where the case is."

He described the current practice of valuations in greater detail. "There is a fair amount of research out there that shows that the education level of the parents can often be a predictor of the education levels that could have been attained by the injured party. For example, realizing that this is not 100%, if neither of my parents went to college, the odds are, it is more probable than not, that given my parent's education that I would not have gone to college." Next, after education, he explained, a child's future is most accurately predicted through race and gender:

> So age, definitely. You need to consider when you're forecasting future earnings but for the injury. Gender is usually taken into account as well, given especially the income inequality between genders, that needs to be factored … charts published by the Census Bureau show how, by gender, age, and race, average earnings level by, even quintiles, the average white female with a bachelor's degree, might have x earnings. They break it down into quintiles or deciles. Isn't that amazing?

The importance of forensic accounting and the employment of statistics in cases of injury cannot be understated. Most cases never get to trial and never see a jury. Instead, cases are predominantly settled behind closed doors. This can be attributed to a number of factors, including issues of costs and risks. As one attorney, however, explained to me: when settlements are presented to disadvantaged individuals, the amount offered, even though it's not enough to change the child's life, "is probably the most money the parents have ever seen in one place." For these families, this amount of money is "hard to turn down." The defense makes an argument that the child will have "a future as a gas station attendant" and offers "a couple hundred thousand" and "that's rent for this family

for a very long time and medical expenses, too. So they settle. They settle for much less than what they should get."

Through my investigation it was established that the use of numbers is both implicit in the governing texts surrounding the realm of tort law as well as a pervasive component of the law suit process. Their prevalence increases in injury cases as they usually settle before going to trial. This is particularly problematic when dealing with the value of human injury in the realm of the law, often equated with the realm of justice. I demonstrate how the issue of justice fades and instead the prevalence of calculation enables a transmutation of physical injury to affectless statistics.

**Numbers as a Tool of Argumentation**

When asked whether or not one's future can truly be predicted based on demographic data, a forensic accountant answered me with a frank tone. "Well, of course, there are always exceptions. There's always going to be that one person that defies expectations. But we don't have a crystal ball. We can't think about this one percent that might have done better or worse than our prediction. It's statistics, it's just the way it is. Probability is predominantly accurate, and to be honest, is the only real way to do the work that we do."

Reliance on probability as an accurate measure of prediction is, according to Ian Hacking, a relatively new phenomenon. In the twentieth century "society became statistical." In this environment, "a new type of law came into being, analogous to the laws of nature, but pertaining to people. These new laws were in

terms of probability."[70] The task of determining future lost income is one that is dependent upon probability, normalcy, and few deviations from this normalcy. The force of statistics in calculating an individual's value in cases of injury law has certainly been established. In these numbers the injured is no longer an individual, but an aggregate of a collection of markers they possess. Here, numbers and statistics come to be employed as a tool of argumentation in the institution of tort law. This argumentative reality is further muted by strong claims to objectivity and neutrality. This process, I argue, further transmutes the very physical injury to an affectless calculation.

In Khalil Muhammad's work, the *Condemnation of Blackness*, he explores the genealogy of certain patterns in racial crime discourse to examine the means by which "black and white social scientists, social reformers, journalists, antiracist activists, law enforcement officials, and politicians construct, contest, and corroborate their claims regarding black criminality."[71] Racial analyses of crime data during the Progressive era, he claims, has given intellectual credibility to the commonly accepted assumption that links blackness with immorality. Through a consistent misinterpretation of inaccurate local and national crime data statistics researchers have produced connections between African Americans and crime.[72] Muhammad writes that such researchers did not identify as racists, but instead state that the "numbers speak for themselves." (8) This notion numerical calculations

[70] Hacking, Ian. *The Taming of Chance*. Cambridge: Cambridge University Press, 1990.
[71] Muhammad, Khalil Gibran. *The Condemnation of Blackness: Race, Crime, and the Making of Modern Urban America.* Cambridge, MA: Harvard University Press, 2010.
[72] For more literature on the politics of statistics in racial research, see: Tucker, William H. *The Science and Politics of Racial Research*. Urbana: University of Illinois Press, 1994; Sellin, Thorsten. "The Negro Criminal a Statistical Note." *The ANNALS of the American Academy of Political and Social Science* 140, no. 1 (1928): 52-64.

linked to factual objectivity is critical in understanding the operation of the number in the calculation of future lost income capacity.

It is not that the forensic accountant identifies as sexist, but, as one framed it, "women absolutely make less on the dollar." I take Muhammad's critical lens on statistics in crime to argue that his approach should be expanded into the realm of civil law to confront an area of statistics that is rarely addressed as productive of a certain imaginary and reproductive of inequalities. This silent and largely unquestioned practice produces inequalities that are rendered invisible. Inherent biases are effectively effaced and invisibly reproduced. The discriminatory practice is made difficult to refute by the presumption of objectivity and by the methodology of numbers.

The data and statistics presented in the form of tables in this work are what Sally Engle Merry would refer to as "indicators." Indicators, she writes, are statistical measures that are employed in order to consolidate complicated data into a simple number. Indicators "tend to ignore individual specificity and context in favor of superficial but standardized knowledge." For Merry, the essence of the indicator is that it is simple "and easy to understand." The interpretive elements and embedded theories are replaced by certainty in the form of a single number printed upon a page. She argues that like money, indicators appear "to allow abstraction and easy comparison among groups and countries by converting values into numbers."[73] I answer Merry's call for a more extensive ethnographic study of indicators through my interviews with experts and engagement with case law. In

[73] Merry, Sally Engle. "Measuring the World: Indicators, Human Rights, and Global Governance," *Current Anthropology* (Suppl. 3) S83–95 (2011)

the following case we can observe the way that indicators (statistical measures) are employed as a tool for simplifying complexities, reducing the individual to a number, and justify racial and gender biases through a "numbers speak for themselves" mentality.

On a November evening in 1992, a pregnant mother and her six-year-old child were killed in a car accident. "Ashley Latrise Scott ("Ashley"), Debra Reese Gordon ("Debra") and her unborn child, General Gordon ("General"), were traveling in Debra's automobile through an intersection in downtown Savannah, Georgia, when a United States Postal Service ("USPS") truck wrongfully entered the intersection and struck Debra's automobile. The force of the collision pushed the automobile head-on into another truck that was sitting at the intersection. Ashley, Debra and General died almost immediately after the collision."[74]

The plaintiff's expert, Dr. Rushing, testified that based on Ashley's family history and success in the first grade (even including a report card illustrating her academic achievement), that Ashley would have "attained a college degree and would have entered the work force as either a health technician or teacher." [75] Dr. Coston, the plaintiff's expert, predicted that Ashley's entry-level income would be $23,400.00[3] in 1995 dollars and that "her work-life expectancy would be 34.9

[74] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239)

[75] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239): Ashley's teacher "testified that Ashley was an exceptional child, both as a student and as a person. On her only quarterly report card, Ms. Parker awarded Ashley an "excellent" in every school subject except arts and science. According to Ms. Parker, Ashley had, during the short time that she was in the first grade, exhibited a level of intellectual ability and behavior that surpassed that of most of the other students in her class. Ashley was in fact described by all witnesses as being mature for her age, intelligent, thoughtful, well-mannered and respectful. Ms. Parker further testified that Ashley did not seem to have the fear and trepidation that most children exhibit when they start first grade. Ashley was voted "Student of the Month" in her first-grade class during the month before she was killed."

years, which assumes that she would have been out of the workforce for 8.1 years and retired at the age of 65."[76] Thus, the total present economic loss associated with Ashley's death, according to Dr. Coston, is "$1,728,839.00, based upon lost income of $1,217,247.34, lost fringe benefits of $222,253.76 and lost household services of $289,337.90."

The expert hired by the defense, Dr. Kamerschen, produced a very different predicted value of Ashley's lost income. Ignoring Ashley's academic history as "illegitimate" and "impermissible in court" he instead calculated based on the racial demographic of black females of all education levels in the United States.[77] Using this standard, he projected "a base-level before tax income for Ashley of $13,202.00."[6] He then calculated her worklife expectancy, assuming that "she would have entered the workforce at age 20 and would have a worklife expectancy of 28.15 years, which is an average of worklife expectancies for 20-year old black females of all education levels." Dr. Kamerschen, "calculates her total loss as $235,314.00, based upon lost net income of $164,720.00 and lost fringe benefits of $70,594.00."[78]

The unborn child was subjected to the same level of analysis. Dr. Rushing predicted that "he would have attained either a two-year or four-year college

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[76] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239): Dr. Coston's projection as to Ashley's starting salary is based upon *Occupational Outlook Quarterly,* (1992) (Plaintiff Childs' Exhibits 28, 35).

[77] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239): see footnote [6]: "Dr. Kamerschen's source is *Money Income of Households, Families, and Persons in the United States: 1992,* U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 184

[78] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239)*:*See Note [7]: *"* Dr. Kamerschen relies upon the same publication for his worklife expectancies as does Dr. Coston, *Worklife Estimates, Effects of Race and Education,* Bulletin 2254, U.S. Dept. of Labor, Bureau of Labor Statistics, (U.S. Printing Office February, 1986), but uses different tables within the publication. Dr. Coston relies upon Table 4 of this publication, while Dr. Kamerschen averages the worklife expectancies in Tables A-5 and A-6, found at pages 19 and 20 of the publication."

degree." Thus, he calculated General's lost income based upon those two different profiles. He found "the total loss to be $1,724,335.00, with the value of lost future income being $1,441,752.00 and lost fringe benefits of $282,583.00." Calculated by the same side, Ashley's future lost income was $200,000 less.

For the defense, Dr. Kamerschen once again included racial demographics, calculating the weighted average of "the actual historical before-tax income for black males of all education levels in the United States, which is $16,990.00 in 1993 dollars."[19] He assumed that General would have entered the workforce at twenty and would work for 35.22 years.[79] Using this data he then deducted "30% of this figure for income taxes and a further 50% from the resulting figure to account for his personal consumption." He estimated the future lost income capacity of $303,349.00. The same expert estimated Ashley Scott's lost future income at $164,720.00 Based exclusively on the difference of gender, he assumes that General would have made almost double what his sister would have earned in a lifetime. These values are represented in the figure below:

| | Ashley Scott | General Scott | Difference in Calculation by Same Expert (gender as a factor) |
|---|---|---|---|
| **Plaintiff Attorney Calculation of Future Lost Income Capacity** | $1,217,247.34 | $1,441,752.00 | $224,504.66 |
| **Defense Attorney Calculation of Future Lost Income Capacity** | $164,720.00 | $303,349.00 | $138,629.00 |
| **Difference in Calculation by experts (race and gender as factors)** | $1,052,527.34 | $1,138,403.00 | |

**Figure 3:** *A depiction of the calculations of future lost income capacity for each of the children by forensic accountants on either side of the law suit.*

[79] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239): "which is an average of the worklife expectancies for 20-year old black males of all educational levels."

If this case had been a settlement case, perhaps these numbers would have been accepted upon initial presentation. However, the jury was unsatisfied with the material presented, and upon review of all of the data, in the final decision the judge produced a brief expressing the following:

> Thus, because no one can know what Ashley's or General's educational and occupational achievement would have been, the experts were at liberty to make assumptions consistent with the interests of the party for which they were testifying. Plaintiffs' experts were optimistic in their assumptions about Ashley's and General's schooling, starting salary and expected worklife, while defendant's expert was very conservative in his assumptions about these critical elements. It is not surprising, then, that Dr. Coston's appraisal of the economic loss associated with Ashley's death exceeds Dr. Kamerschen's appraisal by almost $1.5 million, while Dr. Rushing's appraisal of the economic loss associated with General's death exceeds Dr. Kamerschen's appraisal by more than $1 million.

In this case, the judge was troubled by the difference between the siblings' estimated economic loss, particularly given that the male child was not yet born, and ultimately chose to avoid the issue of calculating future lost income capacity in favor of a more holistic approach to the damage awards. This outcome is one that would not have happened had the case settled before trial. The methods put forward by the forensic accountants would have been considered legitimate.

Why was Ashley's report card considered to be illegitimate evidence of a bright future as compared to statistics based on an aggregated average of all women belonging to her racial category? Numbers are extremely powerful tools that come to represent inarguable facts; a decision that is "made by the numbers" is a decision that is fair and without personal biases. Numbers are a tool for argumentation. In calculating future lost earning capacity the employment of certain numbers result in vastly disparate damage awards. This produces a certain reality whereby some

lives are worthless compared to others. Further, the numbers are able to remove the focus away from the injured. Ashley's report card is not considered an appropriate measure, but aggregate data from 1986 representing females of the same race is considered to be more of an appropriate measure. This reproduction of social and racial hierarchies of value is muted and rationalized through (often rivaling) ideas about objectivity.

These numbers are used to explain the individual through the aggregate. The construction of an individual's worth out of the aggregate effaces a person's life history, biography, and everything that makes him/her a human being. It groups, categorizes, marks, moralizes, and stereotypes. Although they use aggregate data, they deploy it in relation to individual characteristics such as age, gender, and race. This makes it appear as if forensic accountants attended to the individual experience. However, I would argue that this "individualizing" deploys the use of questionable demographic data and renders it acceptable, all through the conjuring of objectivity.

**Objectivity**

I am sitting across from Mr. Thomas, a forensic accountant who works predominantly for the defense at a long table in a conference room at his firm. Besides the table, chairs, and a filing cabinet, the room is completely empty. We had been talking for about twenty minutes when I asked about the very human part of his job. I tried to phrase the question plainly. "Can determining the future lost income capacity of an injured child be an emotional or difficult job?"

Mr. Thomas answered quickly. “So I work predominantly on the side of the defense… although I do work for the plaintiff side on occasion, I’m no hired gun!” He paused. “Well, it’s not so emotional. You keep it separate and compartmentalize.” He moved his hands across the table in a chopping motion. “Or else, the truth is, the case might elicit sympathy and you don’t want to let that influence the analysis! You need to stay objective. Sure, sometimes you might see them wheel an injured party into court, but you have to compartmentalize. Objectivity, objectivity, objectivity.” I pushed this line of logic a little further and asked if he personally sees or examines the injured individual. He responded as quickly as he had before. “Listen, if I see a seven-year-old girl who has severe chemical burns on her face from a faulty product, I might not be as objective. I give the attorney on the case interrogatories and they pass the information along back to me. You understand? You need to compartmentalize, you need to stay objective. Separate the numbers, you know?”

For this accountant, objective reality is not rooted in the injury itself. In fact, he believes that exposure to the injured (“a seven-year-old girl who has severe chemical burns on her face”) his objectivity will be compromised. For this expert, “interrogatories” and information passed back to him through a third party is necessary to remain objective. An elicitation of sympathy would compromise his analysis. Notably, this accountant works predominantly on the side of the defense. Although constantly bringing us back to his impartiality, “I’m not a hired gun”, or “I work *predominantly* on the side of the defense”, the reality is that he is hired by the defense to perform a function. This dissociating expert bases his concept of

objectivity as removed from the corporeal, and, as described by Boyer in his examination of experts, may be "prone to experience and to evaluate his/her labors as free of sensuous, corporeal context, given that the character of intellectual labor is continuously oriented to mental activity, given that so much productive energy is focused into the minute attentions of mental work, especially into the creation, interpretation and transaction of epistemic forms."[80] (248) This idea of objectivity is consistent with the dissociated mask.

In an interview with a forensic accountant who works predominantly for the plaintiff, when asked the same question I received a very different answer.

> Oh yes, it can be extremely sad to see these injured individuals. I work predominantly on the plaintiff side and occasionally for the defense, as I described to you earlier. So I see a lot of injured people. It's particularly heartbreaking when someone is disabled to the extent that they can no longer enjoy the things that they were once good at. For example, I had a marathon runner who lost his leg in a work accident. He can never run again, let alone walk without pain.

I asked if he typically sees or examines the injured individual.

> Oh, yes. For me, typically, always when I'm working on the plaintiff side, I like to interview the injured party. I ask them questions, look at them, ask them questions about special skills, trainings… I ask them about their experiences. It's the way to be objective. I interview them because, I find, as an expert it gives me more credibility with the other parties in litigation, whether it be the opposing attorneys, whether it be the judge, whether it be the jury. It gives me more credibility as an expert if I, if the information I obtained comes directly from my objective interaction with the injured party as opposed to information provided to me by an attorney. Because, as you might imagine, there is a filter there so if I'm getting information from the attorney, there is a filter there. So I want to make sure to get as much relevant information there as possible, so I go directly to the injured person. I can then see exactly how this individual was affected by the injury and the extent of the damage. I'm afraid that the attorney might hold something back, as opposed to meeting directly with the individual.

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[80] Boyer, Dominic. "Thinking through the Anthropology of Experts." *Anthropology in Action* 15, no. 2 (2008): 38-46.

For this forensic accountant, who notably works predominantly on the plaintiff side, the only way to be objective is to directly interact with the injured party. He argues that if he is receiving the information from a third party, there is not only "a filter" but inhibits him from seeing "exactly how the individual was affected by the injury." He notes the example of a marathon runner who loses a leg as being "heartbreaking." For this expert, objectivity is rooted in the individual. This expert most closely aligns with the idea of the moral expert, rooting his valuation in personal characteristic, narrative, and notions of compensatory justice.

Despite this stark contrast, the rationale for both expert's behaviors was the same: a desire to remain objective. Either 'I don't examine the injured party because it is my job to be objective' or 'I examine the injured party because it is my job to be objective.' Objectivity appears the ultimate goal. The concept of rivaling notions of objectivity is evident in the case of forensic accountants hired in lawsuits. As observed by Randall Albury, a historian of medicine,

> Matters of disagreement between scientific experts are not typically conflicts between objectivity on one side and bias on the other, but conflicts involving two rival conceptions of objectivity... The question of objectivity, then… is not properly a question of deciding in the abstract which expert is more objective. It is a concrete question of which expert's version of objectivity is to be preferred. [81]

Objectivity as a term is difficult to define but is commonly associated with qualities like impartiality, neutrality, and independence. In this case, objectivity is predicated on good science in that this critical evidence based science can liberate the data from being contaminated by subjectivity, personal agenda, biases, or

[81] Albury, Randall, and Ditta Bartels. *The Politics of Objectivity*., Vic.: Deakin University Press, page 42, 1983.

gratuitous speculation. For the purposes of this study, when I refer to objectivity I use Porter's loose definition of the term as meaning "the opposite of subjectivity" when I refer to the term.[82] It rejects and disassembles the idea of individual bias. However, I do not hold each of the informants to this definition when they mobilize the term. The rivaling notions of objectivity are accompanied by distinct definitions of what it means to perform objective study.

Porter provides distinct frameworks for understanding concepts of objectivity. The first framework, the absolute sense of objectivity, derives from the ideal of "representing things as they really are." (1) This sense of objectivity "aspires to a to a knowledge so faithful to reality as to suffer no distortion, and toward which all inquiries of good will are destined to converge." This is the ideal that all of the interviewed experts hope to represent.

The plaintiff-hired accountant most closely aligns with what Porter calls the "dialectical sense of objectivity," which emphasizes not the universal criteria of what constitutes validity but particular disciplinary criteria. This sense of objectivity contains within it a "positive attitude toward subjectivity." This sense of objectivity is not only comfortable with the idea of subjectivity, but claims that it "is indispensable to the constituting of objects." Closely associated the dialectical sense is a strong preference for the act of "doing" over just "viewing."[83] This may at first glance appear to be inconsistent with the absolute sense of objectivity, but as Porter notes:

> There is a strange and telling symbiosis between absolute objectivity and dialectical objectivity. Indeed, one might even see absolute objectivity as a

[82] Megill, Allan and Porter. *Rethinking Objectivity*. Durham: Duke University Press, 1994.
[83] Ibid.

> special case of dialectical objectivity, requiring the construction of a particular *sort* of knowing subject.

In the dialectical sense of objectivity knowledge of the subject becomes central to achieving absolute objectivity. For the forensic accountant on behalf of the plaintiff, in engaging directly with the injured (an act of "doing") presents a notion of objectivity that embraces the "heartbreak" and the individuality of the injured individual.

Porter presents another form, the "procedural sense of objectivity" which most closely corresponds with the position of the defense-hired accountant. The procedural sense of objectivity focuses on "impersonality of procedure" that abstracts the "hoped-for-aim of truth" thus expanding the space between truth and objectivity. Porter states that the governing metaphor of procedural objectivity is not visual, and in fact, it's motto might be "untouched by human hands." (10) This aligns quite well with the expert who refuses to interact directly with the injured party, in that a reliance on numbers and interrogatories negates the need for personal and intimate knowledge or interaction. Interrogatories and indirect statements become not only sufficient, but in fact preferable for a direct interaction with the injured party.

When we consider the adversarial nature of the United States legal system, understanding engagement with objectivity becomes increasingly complex. As one lawyer professed, "can you think of another industry, besides sports, in which you are so confrontational with others and your success hinges on beating them?" Recalling the win/lose language present in many conversations with the forensic accountants, ("slam dunks," "*we* ended up losing," "I've had my butt kicked") it is

not hard to imagine that the objectivity that they strive to achieve is complicated by their own positionality. As mentioned throughout, each forensic accountant makes it known that they occasionally do work on the other side.

How can we account for the increased distance between the subject and the accountant in the case of the defense-hired forensic accountant? Perhaps, the answer is a simple one: refusing to see the injured party is a coping method by which the accountant is able to proceed with his job without truly acknowledging the human on the other side of his equation. distancing becomes necessary to his wellbeing. Concepts of identity and individually and notions of who actually constitutes the subject are also highly relevant. If examining the injured individual is "unnecessary to achieving an objective calculation", as one accountant put it, then who in fact is the subject? Is it the individual? Or is it the aggregate?

Objectivity thus becomes a means of both recognizing markers and identities, biases and subjectivities, and erasing them. The social construction of objectivity, enabled by the numerical valuation systemic to tort law serves to reproduce the biases inherent in the aggregate. A discourse of objectivity enables this.

Through numbers and objectivity the injured individual collapses into a digit-figure. A fatal car accident, a loss of a leg, and a brain injury are reduced to a numerical representation of worklife capacity and median wages. Through this process the six-year-old girl who proudly held up her report card to her pregnant mother, the marathon runner who had just come close to achieving a new personal record, or the nineteen-year-old commercial artist with aspirations to open her own

gallery, are reduced to black-female, white-male, white-female. Numbers perpetuate racial and gender inequalities through the construction of objectivity and the dehumanization of the participants. These numbers purport to be neutral and objective facts on the ground and as such ultimately reproduce forms of structural violence.

# Chapter III:
# Systems of Value

*"In suits between man and man, the ancient trial by jury is one of the greatest securities to the rights of the people."*
— Virginia Bill of Rights, 1788

"Going to trial is like rolling the dice. It's pretty risky. You don't know what's going to happen. You don't know what will resonate with the jury and you don't know if the judge will agree. Most of my cases settle, both parties usually prefer it that way… but sometimes we can't come to an agreement. Sometimes we are forced to go to trial." Mr. Stevens sighed as he painted the picture of the courtroom. No longer sitting in a small room across from the opposing attorney to determine a settlement, the courtroom is a theater in which appealing to the jury's values becomes critical to success. In trial, the quantitative process of determining award amounts that dominated the settlement process now becomes slightly muted. Instead it is supplemented by other forms of value that appeal to the jury.[84]

[84] In an injury case that goes to trial, there are five major phases of the tort suit. First, the pleadings initiate the suit. During initial pleadings, the suit proceeds in a similar manner to other civil actions. The lawsuit commences when the plaintiff files a declaration alleging the facts that will result in a cause of action. The cause of action will consist of the specification of the tort. Once the complaint is filed and the defendant is served with a summons, the defendant will file an answer. All of these documents taken together are known as the pre trial motions. The next step, discovery, allows both parties to obtain information and facts that the other will be presenting in the trial. Each side is permitted to seek information about the other. The next phase, pre-trial motions, can sometimes be made before discovery. This is the first part of the lawsuit in which the court makes procedural decisions. Some important and common pre-trial motions include the motions for summary and the motion to dismiss. A motion to dismiss is a judgment on the legal sufficiency of the allegations put forward by the plaintiff. During trial, evidence is introduced, lawyers make their case, and the jury makes an ultimate judgment. A party might decide to appeal the decision on the basis of a claim of legal errors committed by the judge.

The relationship between the attorney and the jury is a complex one. According to Mr. Stevens in the current climate, which he labeled as the "Post OJ Simpson verdict," juries have distrust for lawyers. He smiled ironically as he explained this new phenomenon. "They are much more savvy, they watch all these legal TV shows. People don't trust trial lawyers. You can't take a fact that's an actual fact that's not believable. They won't believe it. A fact is only fact when the jury decides it is a fact." He repeated himself, "trial can be risky, and the jury is made of people that come from a diversity of backgrounds." The unpredictable nature of the jury is something that the attorneys struggle to master after years of experience.

Mr. Stevens, a managing partner at his firm and former assistant district attorney, described a case that his coworker had litigated recently. Leaning in, he smiled. "So in this case, we had a jury that was pretty racially diverse and sort of middle or lower income. And then the defense had this ridiculous white expert in suit and tie explaining why this black child was going to be a failure in life."

Through his grin, without breaking eye contact, he said "when I see that in trial, I love it." He paused and then banged his fists on the table. "When I see that? Oh, I can exploit it. I can tear it apart. I can expose the bias." He painted a vivid picture. "Imagine these white corporate experts standing up on the stand talking about African American children in this way. Dictating their potential. Establishing their futures." Cases valuing a minority life by all white males "present a sort of bias of this 'poor black kid that the parents can't even take care of' can go a few ways" he continued. "Sometimes, in this current climate, that will just make the

jury give them more money. On our end, we want to capitalize on this. In the jury instructions, on our side, the plaintiff's, we want to take someone that has barely had a chance from birth. That way, they can look at this injured kid differently." From his discussion, the racialized body of experts and jurors emerges to question the forms of judgments juries may enact.

"That said," he stopped smiling, "It is much harder when the expert himself is a minority. That changes everything." The "smart insurance defense attorneys know this. They get minority experts to testify." He reaffirmed his earlier statement. "Otherwise, with just a white team, the jury might punish the defense. If everyone is white on the other side? That's a big mistake for them."

A juror comes into the courtroom not as a "tabula rasa" but as an individual possessing preconceived notions, experiences, and values. Attorneys are aware of this, and influence the jury through value appeals. I argue that these values can be effectively understood as part of three intersecting value systems. I are that these value systems can be categorized into productivity values, picket-fence values, and the devaluation of marked bodies. Here, the operational definition of the marked body is one that falls outside of the "white male" category. Through an examination of these interlocking value systems I expose the reproduction of inequality that exists within this "politically neutral" arena of the judicial system.

**Productivity**

The determination of future lost income capacity cannot be separated from notions of productivity as a determination of value. Occurring on two fronts, the first is the productivity of the market. As discussed, the history of tort law as deeply

engrained with the industrial revolution has inextricably linked the institution to a theory of labor value. As I describe in the introduction, one theory on the purpose of tort law is that it was intended to be a market corrector. The market corrector idea is intensely related to productivity as a function of market success and sustainability of the economy.

The second front is on the level of the individual. When calculating future lost income capacity, we are inevitably talking about worklife. An emphasis on productivity and production value is embedded in the process of determining future lost income capacity. This begins in the industrial revolution where workers, suddenly working in more dangerous and bureaucratized positions, were also working jobs that rendered them much more replaceable. Compensation for injury came to be linked to contributive aspects of labor.

As mentioned before, the text *Determining Economic Damages* by Gerald Martin is considered to be the "bible" for forensic accounting. The first chapter begins with a comparison of a human to a machine.

> One of the many roles of an economist is to measure and forecast the output, or productivity, of an asset and its ability to generate income. Usually the asset is anything from a piece of machinery to a total business operation and these are the things that received most of the attention. Often ignored is the fact that people are also assets with the ability to generate income for use by themselves and their families. And, like machines, people require maintenance, upkeep, overhaul, and repairs to keep them in operating condition. When a machine is destroyed, it no longer produces income, and the same is true for person. When a machine is damaged, it must be repaired, and so must a person. Forensic economists in personal injury and wrongful death actions focuses on the measurement of the income producing abilities of persons and on the cost to maintain them in the best possible condition.[85]

[85] Martin, Gerald D. *Determining Economic Damages*. Santa Ana, CA: James Pub. Group, 2010.

This quote, relating machines to humans, explicitly portrays the value placed on the human body when calculating future lost income capacity. In the first sentence Martin writes that one of the roles of an economist is to forecast the output or productivity of "an asset and its ability to generate income." Here, it is unclear whether the author is referring to a human or a machine. This is not an error of ambiguity, but rather a reference to the sameness of the two.

Productivity and value are important in this case not only because of the dehumanization that it renders possible, but also because it aids in the inequitable valuation of certain types of labor. Because the calculation refers to 1970-1980 figures it attributes even more disparate award amounts for women, who are more likely to work fewer hours in the workplace in order to maintain the household. In fact, some economists elicit the average breakdown of activities that woman and men participate in on the average day. The table in Appendix D lists categories such as "eating and drinking", "caring for and helping household members", "leisure and sports", and "telephone calls, mail, and email", amongst other factors. In such tables we can see productivity becoming gendered and racialized, literally, to the minute.

**Picket-Fence Values**

The productivity of individuals intersects with the second value system, the "picket-fence values" system. These values are steeped with hetero-normative, moral, and other cultural norms and are best elucidated through examples. Two particular examples illustrate this type of system. The first of these cases is Mr. Harris' account of appealing to a jury. The second is a return to the case of Ashley and General Scott discussed in Chapter II.

Mr. Harris had finished with a trial just last week involving a child who died at two years old. The toddler had tottered out of his daycare center undetected and climbed up four flights of stairs to the roof door. The roof door was unlatched and open. The child easily accessed the roof, fell off the building, and died instantly upon impact with the asphalt below. Mr. Harris sighed. "Two years old. So how do you value his life? How can you predict how productive he would have been but for the negligence of this day care center? It's next to impossible. The statute in Massachusetts says that you have to calculate based on what he would have contributed to his parents and next of kin financially in a lifetime. But how would anybody know? How does a jury decide on what his parents should be awarded?" He answered his own question for me. "It's visceral. I know it's not the answer you're looking for."

I waited for him to explain what he meant, and he quickly explained the factors that might prove influential. "We look at the things that a jury might care about. For example, family dynamic, are the parents still together? Was it an only child?" He paused and put up a single finger. "The real question is, and it is after all, a business decision: what kind of jury appeal will this have?" According to Mr. Harris, the defense will look at the case and ask "given the facts that we have, is this the kind of case that will make the jury mad?" He continued, explaining that he performed the same type of analysis on behalf of the plaintiff. "We say, ok, 'are the parents nice? Are they together?' Is it an only child? Did they have trouble conceiving this child?' All of those have appeal. Some good, some bad. The parents might not be together, they might have restraining orders against each other, the

child might have been removed from the home by DYS, juries won't be in a hurry as much." Here, the injury to the child is overshadowed by the status of the family as determined by picket fence values.

Perhaps I was not masking my surprise well enough, or maybe due to his own awareness of the sound of the scratching of my pen on my notepad, Mr. Harris paused to issue his own disclaimer. "Although if you really stop and think about it, the parental involvement has nothing to do with how the child died, it was still someone else's negligence." Satisfied, he resumed explaining his assessment of jury decisions. "If they like the parents, they are likely to give more money. If they think the parents are drug users and in and out of jail they will rationalize that they don't deserve money. So it is a totally inexact science."

A return to the 1992 case discussed in the previous chapter proves an interesting site to examine such appeals to the accepted values and norms that might be employed to appeal to a jury. In the injury case involving the death of Ashley Latrise Scott ("Ashley"), Debra Reese Gordon ("Debra") and her unborn child, General Gordon ("General"), the family of the plaintiff refused to settle.[86] Thus, the case proceeded to go to trial. The attorney arguing on behalf of the deceased appealed to the jury, stating that the family "regularly attended church in Savannah where Ashley sang in the choir," and that "Ashley was also very active in the Girl Scouts." The attorney also wanted to make it clear that although Ashley's father did not live in the home, he was heavily involved in Ashley's life. On the stand, her father "testified that he frequently visited Ashley in Savannah and occasionally took

[86] *Childs v. U.S.* (NOS. CV 494-252, CV 494-239)

her back to Hardeeville to be with his family. Ashley and her father also regularly took trips to the beach and to amusement parks such as Six Flags and Walt Disney World." They made it clear that Debra's personal life centered around church and family.

On the side of the defense, the attorney argued that perhaps this was not as stable a family as was presented. "Debra was married for five years but did not have any children from that marriage. In 1985, her husband committed suicide. Thus, at the time of her death, Debra was an unmarried widow living alone in her own home in Savannah, Georgia. She knew that she was going to give birth to a boy out of wedlock and had decided to name the child after her father, General Reese. Debra did not, however, disclose the identity of the father of General to anyone, and General's father remains unknown to this date. Thus, although General clearly would have been the beneficiary of the love, care and companionship of Debra and her family, he was apparently going to be born into a home in which the father would be completely absent."

In the above examples we see the "picket fence" value system emerging. In the case of the two-year-old described by Mr. Harris, he mentions the factors that can be used to sway a jury in their valuation of an award amount. The first of these factors is the family structure of the injured child. Mr. Harris stresses that the jury perceives an only child to be more valuable to the parents, deserving a larger award. A child conceived through in vitro fertilization, who was presumably more difficult and expensive for the parents to conceive, would also be worthy of a larger award. A loss of a child from a two-parent household, from the perspective of the jury,

might appear a more catastrophic of a loss as it disrupts the ideal familial type. Accepted societal norms come to affect how likely the jury is to confirm or deny the proposed future lost income capacity by the attorneys on either side of the case. A hetero-normative, moral imaginary of ideal families is constructed and deployed in jury appeals. In the case of Ashley and General Scott, we find again the notion of a two-parent household as indicative of a more valuable and nurturing home environment. The defense finds it relevant to mention that General was going to grow up in a single parent household. The injury attorney found it critical to mention that Ashley's father was heavily involved in her life. Further, we see appeals to religious and moral values. The plaintiff side stresses the family's involvement with the church (in which, they find it important to note, Ashley sang in the choir), and emphasizes Ashley's membership in the Girl Scouts. These appeals to picket fence values are employed to influence the jury and their valuation of the child's future and value.

**The Devaluation of Marked Bodies**

In addition, a "devaluation of marked bodies" intertwines with productivity and picket fence value systems. In this system, we find that certain physical bodies appear to be simply worth less than others in the eyes of the jury immediately upon being marked. In 1985, two researchers sponsored by the Rand Foundation and the Institute for Civil conducted an enormous study in which they evaluated more than nine thousand jury trials in the same jurisdiction over the course of a twenty-year period.[87] The study sought to determine whether or not it was possible to "show

[87] Chin, Audrey & Peterson. *Deep Pockets, Empty Pockets: Who Wins in Cook County Jury Trials*? Santa Monica: RAND Institute for Civil Justice (1985)

any relationships between litigant characteristics and jury verdicts." There results showed that "blacks lost more often than whites" and that "black plaintiffs received smaller awards."[88] The study showed that when adjusted for all variables besides race, black plaintiffs received on average 74 percent of the award received by their white counterparts. In an extensive 2003 study by Greene and Bornstein, it was confirmed that juries tend to reproduce economic inequalities that are associated with race and gender when determining damage awards in injury cases.[89] There has been extensive research reflecting bias in the realm of criminal law, but civil law has been predominantly neglected from critique. Despite the shortage of literature, the studies that have been conducted reflect the Rand Foundation and Green & Bornstein's findings that juries award smaller settlements for women and minorities, particularly African Americans.[90]

Chamallas, a prominent feminist legal theorist has argued that age, sex, and race, are typically the only characteristics of the injured person noted in the prediction of one's future. Acknowledging that these may be reasonable factors of prediction, she problematizes the absence of other accepted categories. She describes this inconsistency in her paper, the *Architecture of Bias*:

> Thus, I suspect that even if the data clearly indicated that, for example, Catholics on the average have higher incomes than Baptists, judges and jurors would be loath to predict future earning capacity based on religious denomination. The same could be said for ethnicity. I doubt that, in a

[88] Ibid.
[89] Greene and Brian H. Bornstein, *Determining Damage Amounts: The Psychology of Jury Awards*, 54-58 (2003).
[90] Ibid; Diamond, Shari Seidman, Michael J. Saks, and Stephan Landsman. "Juror Judgments about Liability and Damages: Sources of Variability and Ways to Increase Consistency." *DePaul Law Review* 48: 301-22. 1998; Hans, Valerie P. *Business on Trial: The Civil Jury and Corporate Responsibility*. New Haven: Yale University Press, 2000; Hastie, Reid, David A. Schkade, and John W. Payne. "A Study of Juror and Jury Judgments in Civil Cases: Deciding Liability for Punitive Damages." *Law and Human Behavior* 22, no. 3 (1998): 287-314.

> wrongful death case of a Japanese-American child, a court would permit an expert witness to testify that Japanese-Americans have higher incomes than the average college graduate. Finally, I would be surprised if the marital status of a single man was used against him in predicting his future income.[91]

Chamallas argues that the use of race and gender is "highly selective"[92] in its unique status as acceptable predictors. I argue that multiple forms of value are intersect with biases of race and gender to enhance this bias. The predominance of race and gender as markers of acceptable categories for predicting an individual's future are tied to moral, social, and productivity based readings. Chamallas' description of these exclusive categories as acceptable realms for the instantaneous prediction of certain bodies as worth less than others is consistent with my "devaluation of marked bodies" value system.

The evidence that race and gender are categories that immediately render some bodies as, quite literally, worth less than others is compelling. Although there needs to be more research conducted on jury discrimination in civil law, the existing data is highly convincing. As Chamallas notes, the categories of race and gender are actually quite specific in nature. These categories are considered effective predictors of one's future, but others, like religion or marital status are not. Although I argue that there are other influential value systems that come to sway the jury, it must be asked. What is it about race and gender that allows for prediction? Why are some marked immediately devalued?

**A Telling Exception**

[91] Chamallas, Martha. "The Architecture of Bias: Deep Structures in Tort Law." *University of Pennsylvania Law Review* 146, no. 2 (1998): 463.
[92] Ibid.

The use of race and gender in calculating awards has persisted almost entirely without protest, with a few notable exceptions.[93] In a 1991 article in the *Journal of Forensic Economists,* "Female Work Experience: Voluntary Versus Involuntary Labor Force Activity" Corcione and Thornton, two forensic accountants, consider an injured twelve year old girl who is the subject of a tort litigation. They ask, "If the economist were to rely simply upon worklife tables based upon the experience of an 'average' woman, the resulting estimate (about 30 years) would reflect considerable periods of inactivity and frequent entry to and exit from the labor force–mostly due to marriage, child- birth, and child-rearing. But is it reasonable or fair to assume that the twelve-year-old would have been similar to that of an 'average' woman?" (p. 164) However, the most prominent moment of dissent occurred years later.

On September 11th, 2001, the United States experienced an unprecedented tragedy. In the days following the terrorist attacks at the World Trade Center, the Pentagon, and Shanksville, Pennsylvania, Congress quickly passed the Air Transportation Safety and System Stabilization Act.[94] Fearing mass litigation and subsequent disruption of the airline industry prompted Congress to respond quickly and powerfully. In addition to protecting the airline industry, Title IV of the Act established the "September 11th Victim Compensation Fund of 2001" to

[93] See: *Reilly v. United States*, (665 F. Supp. 976, 997 D. R.I. 1987): In which the court rejected the expert's suggestion to reduce the injured female plaintiff's loss of earning capacity by 40% based on BLS worklife tables. Judge: "[a]s a factual matter, I seriously doubt the probative value of such a statistic with respect to twenty-first century women's employment patterns, particularly in light of current, ongoing changes in women's labor force participation rates."*;* See also: *Drayton v. Jiffee Chemical Corp (*591 F.2d 352, 368 6th Cir. 1978).

[94] Air Transportation Safety and Stabilization Act, Pub. L. No. 107-42, 115 Stat. 230 (2001) (signed into law by President George W. Bush September 22, 2001)

compensate the victims of the terrorist act. The specified intention of the Fund was to both provide compensation and also a no-fault alternative to tort litigation. The Act provided that the Fund was to be administered by a Special Master appointed by the Attorney General, Kenneth R. Feinberg. The fund contained four billion dollars designated for pay out to the family of the victims. If divided equally amongst all families, this would provide for an average payout of $1.85 million per family. In late December of the same year, Special Master Kenneth Feinberg in conjunction with the Department of Justice, released the Interim Final Rule, which can be read in total in Appendix E. This set of regulations sought to explain who was eligible to make a claim, amount eligibility, and the procedure.

This first compensation model produced by Kenneth Feinberg and the U.S. Justice Department used the Markov Increment Decrement model (MID) to determine worklife expectancy by gender.[95] This model uses the Bureau of Life Statistics 1986 data. Using this calculation model, the following chart would apply when determining future lost income of the injured.

Table 1
Example MID WLE estimates from SCK

| Beginning Age | High School Educated Active in the Labor Force | | Women's WLE as a % of Men's |
|---|---|---|---|
| | Men | Women | |
| 18 | 38.72 | 32.91 | 85.0% |
| 25 | 33.64 | 28.68 | 85.3 |
| 35 | 25.37 | 22.17 | 87.4 |
| 45 | 17.14 | 15.38 | 89.7 |
| 55 | 9.71 | 9.03 | 93.0 |
| 65 | 4.72 | 4.62 | 97.9 |

**Figure 4:** *A depiction of the relative worklife expectancy of high school educated males & females according to the Markov Increment Decrement (MID) Model.*

[95] *Journal of Forensic Economics* 25(1), 2014, pp. 51-70, 2014 by the National Association of Forensic Economics, Total Worklife Expectancy , Kurt V. Krueger and Frank Slesnick*

This chart would mean that for a high school educated man and woman who both entered the workforce, for example, at twenty-five, they would receive significantly different award amounts. The injured female has a work life expectancy of 28.68 years. The injured male has a work life expectancy of 33.64 years. Even if they were performing exactly the same job, it would be assumed that the female would persist for fewer years in the workforce. Despite a longer life expectancy, it would be assumed that she takes more time off, for example, to rear children. Therefore, she would receive an award of future lost income capacity that is 85.3% of the award received by her male counterpart.

Upon release of the Act there was immediate backlash. The NOW Legal Defense and Education Fund, a prominent national non-profit civil rights organization defending women's rights in the legal and educational realm, sent a letter encouraging abandonment of the use of race and gender in calculating compensation.[96] An excerpt from the letter, found in full in Appendix F, claims:

> "Many of the victims of the September 11th attacks were women, the majority of whom worked full time. Many of these women were also members of racial and ethnic minority groups, as were large numbers of the tragedy's male victims. We are concerned that the Interim Final Rule setting forth federal regulations to implement the Fund may discriminate against and threaten the constitutional rights of the victims of the terrorist attacks, through the Fund's anticipated use of gender and race-based data to determine compensation. This practice, we believe, threatens the constitutional rights of women and minorities, spinning into the future a history of state and private discrimination against these groups."

The National Association for the Advancement of Colored People voiced similar opposition.[97] Not only were they opposed to use of these race based tables,

[96] See Appendix F
[97] See Appendix G

but also had learned that the Special Master had decided to use the 'most recent' Bureau of Labor Statistics study to make such calculations.[98] These most recent tables were published in 1989, more than ten years earlier and relied on data obtained from 1979-1980. In the figure below taken from the aforementioned BLS data, the expectation would be that from birth it can be presumed that a white male would work for about 39.8 years of his life, and males of the "blacks and others" category would work for 32.9 years of their lives. Periods of inactivity took place "during prime working ages" for minorities.[99] This would mean that during the years in which a person would be likely to achieve their highest earnings, minorities would experience a period of "labor inactivity."[100]

**Table 4. Selected worklife indices by sex, 1970, 1977, and 1979–80, and by sex, race, and years of schooling completed, 1979–80**

[In years, unless otherwise indicated]

| Index and age | Men | | | | | | | | Women | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | | 1979–80 | | | | | Total | | | 1979–80 | | | | |
| | | | | Race | | Schooling completed | | | | | | Race | | Schooling completed | | |
| | 1970 | 1977 | 1979–80 | White | Blacks and others | Less than high school | High school to 14 years | 15 years or more | 1970 | 1977 | 1979–80 | Whites | Blacks and others | Less than high school | High school to 14 years | 15 years or more |
| Life expectancy: | | | | | | | | | | | | | | | | |
| At birth | 67.1 | 69.3 | 70.9 | 70.7 | 65.3 | 70.0 | 70.0 | 70.0 | 74.8 | 77.1 | 77.6 | 78.3 | 73.9 | 77.6 | 77.6 | 77.6 |
| At age 25 | 45.1 | 46.8 | 47.3 | 47.9 | 43.3 | 47.3 | 47.3 | 47.3 | 51.9 | 53.8 | 54.2 | 54.7 | 51.0 | 54.2 | 54.2 | 54.2 |
| At age 60 | 16.1 | 17.0 | 17.5 | 17.6 | 16.5 | 17.5 | 17.5 | 17.5 | 20.8 | 22.1 | 22.4 | 22.6 | 21.0 | 22.4 | 22.4 | 22.4 |
| At age 65 | 13.1 | 13.9 | 14.2 | 14.3 | 13.8 | 14.2 | 14.2 | 14.2 | 17.0 | 18.3 | 18.5 | 18.7 | 17.7 | 18.5 | 18.5 | 18.5 |
| Worklife expectancy:[1] | | | | | | | | | | | | | | | | |
| At birth | 37.8 | 37.9 | 38.8 | 39.8 | 32.9 | [2]34.6 | [2]39.9 | [2]41.1 | 22.3 | 27.5 | 29.4 | 29.7 | 27.4 | [2]22.3 | [2]30.1 | [2]34.9 |
| At age 25 | 34.0 | 33.4 | 33.1 | 33.8 | 28.6 | 29.2 | 33.8 | 36.1 | 19.0 | 23.0 | 24.0 | 24.1 | 23.5 | 17.9 | 24.4 | 27.9 |
| At age 60 | 6.0 | 4.3 | 4.4 | 4.5 | 3.3 | 3.3 | 4.7 | 6.3 | 3.1 | 2.5 | 3.0 | 3.0 | 3.0 | 2.3 | 3.3 | 3.5 |
| At age 65 | 3.1 | 1.9 | 2.3 | 2.3 | 1.8 | 1.8 | 2.4 | 3.6 | 1.4 | 1.1 | 1.5 | 1.5 | 1.5 | 1.2 | 1.8 | 1.8 |
| Percent of life economically active:[2] | | | | | | | | | | | | | | | | |
| From birth | 56.3 | 54.7 | 55.4 | 56.3 | 50.4 | 49.4 | 57.0 | 58.7 | 29.8 | 35.7 | 37.9 | 37.9 | 37.1 | 28.7 | 38.8 | 45.0 |
| From age 25 | 76.3 | 71.4 | 70.0 | 70.6 | 66.1 | 61.7 | 71.5 | 76.3 | 36.6 | 42.8 | 44.3 | 44.1 | 45.1 | 33.0 | 45.0 | 51.5 |
| From age 60 | 37.3 | 25.3 | 25.1 | 25.6 | 20.0 | 18.9 | 26.9 | 36.0 | 14.9 | 11.3 | 13.4 | 13.3 | 14.3 | 10.3 | 14.7 | 15.6 |
| From age 65 | 23.7 | 13.7 | 16.2 | 16.1 | 13.0 | 12.7 | 16.9 | 25.4 | 8.2 | 6.0 | 8.1 | 8.0 | 8.5 | 6.5 | 9.7 | 9.7 |
| Labor force entries per: | | | | | | | | | | | | | | | | |
| Person born | 2.9 | 3.0 | 3.9 | 3.9 | 4.3 | 4.3 | 3.7 | 4.6 | 4.6 | 4.5 | 5.5 | 5.6 | 5.4 | 5.8 | 5.6 | 5.8 |
| Person age 25 | 1.2 | 1.1 | 1.5 | 1.5 | 1.8 | 2.0 | 1.5 | 1.4 | 2.8 | 2.7 | 3.0 | 3.0 | 3.1 | 3.3 | 3.2 | 2.7 |
| Expectected duration per entry remaining: | | | | | | | | | | | | | | | | |
| From birth | 13.0 | 12.6 | 9.9 | 10.2 | 7.7 | 8.0 | 10.8 | 8.9 | 4.8 | 6.1 | 5.3 | 5.3 | 5.1 | 3.8 | 5.4 | 6.2 |
| From age 25 | 29.4 | 29.1 | 22.1 | 22.5 | 15.9 | 14.6 | 22.5 | 25.8 | 6.8 | 8.6 | 8.0 | 8.0 | 7.6 | 5.4 | 7.6 | 10.3 |
| Voluntary exits remaining: | | | | | | | | | | | | | | | | |
| At birth | 2.6 | 2.7 | 3.6 | 3.6 | 3.9 | 4.0 | 3.6 | 4.5 | 4.5 | 4.4 | 5.4 | 5.5 | 5.4 | 5.7 | 5.7 | 4.7 |
| At age 25 | 1.6 | 1.7 | 2.3 | 2.3 | 2.4 | 2.7 | 2.3 | 2.2 | 3.3 | 3.3 | 3.8 | 3.8 | 3.7 | 3.9 | 4.0 | 3.6 |
| Percent dying while active | 36.3 | 27.0 | 27.4 | 26.7 | 31.7 | 23.0 | 28.5 | 34.0 | 10.8 | 9.5 | 10.4 | 9.7 | 14.6 | 8.0 | 11.2 | 12.4 |

[1]Population-based index.
[2]Years of work expected, if this level of education is attained.
[3]Ratio of worklife to life expectancy at the given age.

**Figure 5:** *1986 Bureau of Labor Statistics chart of selected worklife indices by sex, race, and years of schooling completed. Find the complete tables in Appendix A*

[98] Ibid.
[99] U.S. Dept. Of Labor Bureau Of Labor Statistics, Bulletin 2254: Worklife Estimates: Effects Of Race And Education (1986) page 9
[100] Ibid.

The NAACP published a letter, found in full in Appendix G, urging the Special Master to reconsider. They wrote:

> "We urge you to consider carefully the detailed analysis submitted to you on this date by the NOW Legal Defense and Education Fund but write separately to express our deep concerns regarding published reports that the Special Master of the September 11 Victim Compensation Fund, through implementation of the Interim Final Rules, intends to use life expectancy tables that discriminate against minority and female victims of the September 11 terrorist attacks. It is simply incomprehensible to us that an agency of the United States government would sanction the use of race-based and gender-based calculations to disadvantage people of color and women in the determination of compensation to victims.
>
> Published reports indicate that the Special Master intends to use the separate "work life expectancy" tables to generated by the Bureau of Labor Standards from 1979-80 data. By using these tables (and any other race or gender-based tables) the federal government endorses the concept that minority and female victims of the attack, had they lived, would have faced the same discrimination in the workplace and elsewhere as existed in this country during the last fifty years. The 1979-80 data, if it is to be used, will inevitably reflect the effects of racial discrimination in this country. This is utterly at odds with the federal government's commitment to end race and gender discrimination. Use of race and gender-based classifications in this context is also unconstitutional."

In addition to these personal appeals, activist groups published a variety of opinion pieces in the newspaper and vigorously publicized this injustice.[101] A collective group of congressman petitioned the Special Master to reconsider.[102] Swiftly, the Special Master removed real-world race and gender income disparities from the formula, justifying the decision through the logic that:

> "[I]n order to increase awards for all claimants by maximizing the duration of expected foregone earning and accommodating potential increases by women in the labor force, the Special Master's revised presumed economic loss methodology uses the most general data available. Specifically, the new methodology used the All Active Males table for all claimants. The

[101] See examples such as: "Less for Women? Work life statistics may limit Sept. 11 fund payout to victims." Newsday, January 3, 2002.
[102] See Appendix H

methodology is gender and race neutral."[103]

Mr. Feinberg quickly revised the methodology.[104] The Special Master has been quoted various times as describing this decision as a "generous" one, that was as much an "act of patriotism" in the face of terrorism as an accurate approach to tort law.[105] In short, when the initial calculation was continuing with the conventional calculation that values women and racial minorities as less, there was backlash that resulted in the disposal of the usual method.

What was different about the 9/11 case? Perhaps, the answer is a simple one. This was of the most publicized cases of compensation that the United States had ever seen. Exposed to the public, particularly once the methodology was criticized by both NOW and the NAACP there was pressure to adjust the formula. Maybe it was a far more technical solution. Pressed for time and dealing with massive numbers of affected individuals, this was a simpler way to allocate the funds without protest. Maybe still, it was as the Special Master described, a generous act in the face of a terror attack that shook the country to its roots, instilling deep seeded patriotism. By this logic, we are all Americans, and we should be treated equally as such. If this in fact was the case, what does this indicate about the normal procedure? What lives are considered more American? What values comply with this picture of the patriotic citizen? Why is this the exception, not the norm?

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[103] *Final Report of the Special Master for the September 11th Victim Compensation Fund of 2001*, Volume 1, p. 33: "The Fund adopted the more generous standard for males to avoid any gender bias in assumed future work life patterns and to ensure consistency."
[104] See Appendix I- Letter from Special Master authorizing the changes in the methodology.
[105] *Final Report of the Special Master for the September 11th Victim Compensation Fund of 2001*, Volume 1, p. 33: "The Fund adopted the more generous standard for males to avoid any gender bias in assumed future work life patterns and to ensure consistency."

# Conclusion

In today's United States criminal law has been analyzed, problematized, and protested visibly and extensively. The frequency and intensity of movements such as Black Lives Matter or protests against mass incarceration and campus sexual assault policy attest to how racial and gender inequality are salient topics of public concern with respect to criminality. Yet the civil realm of the law, particularly tort law, by contrast, has received little attention. The use of race and gender based tables in the calculation of future lost income capacity has persisted without much, if any, objection. It continues to render these forms of harm invisible. There is, I suggest, a disconnect between civil law, and specifically tort law, and civil rights movements.

Martha Chamallas claims that this inattention to discrimination in tort law might be attributable to the fact that "on its surface, the world of torts appears divided between those who suffer injury and those who inflict injury, categories that are race and gender neutral." [106] Tort law has been conceived of as the realm of the private harm to be dealt with between two parties, while criminal law exists in the public. Because of this positioning then, torts are often not characterized publically and appear to be more removed from categories of race and gender. Public attention paid to tort law is predominantly concerned with ideas about

[106] Chamallas, Martha, and Jennifer B. Wriggins. *The Measure of Injury: Race, Gender, and Tort Law*. New York, NY: New York University Press, 2010.

"ambulance chasers" or frivolous law suits. The binary becomes confined to one of the plaintiff (suing) and the defense (being sued). Therefore, when the phrase "tort reform" is elicited, the imagery produced is not one of reforming the methodology used to calculate future lost income capacity, but instead of caps on maximum possible award amounts.

In my interviews with injury and defense attorneys this argument was evident through a deep concern with public perception in that the scope of their concern appeared narrowly delimited to cases such as the McDonald's coffee case. The entirety of their concern revolves around the public perception of the award amount as "too much or too little". The injury attorney fights the image of the "ambulance chaser" by presenting himself as a public servant who represents the little guy against the corporate monster. The defense attorney, concerned with portraying himself as a defender of businesses and a stabilizer of insurance premiums, emphasizes his necessary role in the reduction of frivolous and inappropriate plaintiff behavior. The forensic accountant is concerned with maintaining his image of the neutral expert, not the "hired gun." Each of the actors attempt to maintain a positive public perception exclusively through the binary that Chamallas describes, "those who suffer injury and those who inflict injury." The appearance of the race and gender neutral categories of the injured versus the injurer ultimately effaces the actual forms of characterizations that are taking place. This is consistent with the debate on the purpose of injury law. By posing the binary between the "market corrector" model versus the "compensatory justice" model, the discriminatory practices implicit in the calculative process of determining future

lost income capacity is muted. This area that should be subject to activism becomes one that persists unquestioned.

In addition to this race and gender neutral category of "injurer vs. the injured", I argue that the lack of activism can be traced to the disquietingly acceptable methodology to which the institution lays claim. Emerging from the industrial revolution, tort law was inextricably linked to assessments of productivity and labor value. Therefore, the calculation of future lost earning capacity has in itself never been questioned as a category of calculation in injury cases. The evolution of this calculation has become one that is increasingly reliant on numbers and statistics. Numbers come to project inarguable realities that are accepted as objective truths. Through numbers injury is effaced and therefore, so is the very thing that it attempts to value. In the use of (often outdated) charts and statistics the individual person is explained through the aggregate. This aggregate data takes into account race, gender, and age, amongst other variables, in an attempt to 'individualize' the calculation. In doing so, the person's life history is affectively effaced, despite the appearance of attention to the individual experience.

The actors in this process are able to maintain their moral stake by placing trust (or purported trust) in the supposedly neutral and objective data that they use to base their assessments. However, there is a great tension here. Particularly in the case of the forensic accountant, the tension between impartiality, objective expertise, and advocacy emerges as consequences of this adversarial system of justice. The experts exist within an institution that craves "fairness" and "justice" and assumes to be producing an objective truth. Yet, simultaneously, they are

working within an inarguably adversarial system. To navigate this quandary, the experts resort to factual, reasonable, and moral arguments to a triangle of arguments and discourses so that they mutually support and solidify one another as they are articulated.

The consequences of cost-benefit calculation in the case of injury law is demonstrated powerfully in lead poisoning litigation. Lead poisoning stands for an example of broader structural forms of inequality, of which there are many. This is a site that illustrates how disparate economic logics continue to perpetuate and intensify structural violence. Lead paint is the primary means by which children are exposed to lead, often through the ingestion of paint chips or dust.[107] Lead paint is most likely to be found in older buildings in lower income neighborhoods, so it disproportionately affects minority and lower income children.[108] In a 2004 piece entitled "Compensating the Lead Poisoned Child: Proposals for Mitigating Discriminatory Damage Awards," Laura Greenberg, an environmental attorney, explains that when courts rely "heavily on race-based statistics and closely scrutinize the achievements of the plaintiff's family, low-income and minority plaintiffs suffer the immediate consequences."[109] Those affected by lead poisoning are disproportionally lower income minorities. Many scholars have come to suggest

[107] Sena, Michael B. "Sorting Out the Complexities of Lead-paint Poisoning Cases." *Journal of Affordable Housing & Community Development Law*, 1995; English, Peter C. *Old Paint: A Medical History of Childhood Lead-paint Poisoning in the United States to 1980*. New Brunswick, NJ: Rutgers University Press, 2001.

[108] See: Using GIS to Assess and Direct Childhood Lead Poisoning Prevention: Guidance for State and Local Childhood Lead Poisoning Prevention Programs, *Center for Disease Control* (2004); Surveillance for Elevated Blood Levels Among Children, *Center for Disease Control* (2001); Chamallas, Martha, and Jennifer B. Wriggins. *The Measure of Injury: Race, Gender, and Tort Law*. New York, NY: New York University Press, 2010.

[109] Greenberg, Laura. Compensating the Lead Poisoned Child: Proposals for Mitigating Discriminatory Damage Awards, *Environmental Law Review* (2001)

the same. Because of the lower future lost income capacity it becomes "cheaper to injure poor and minority children" and thus, landlords' have less incentive to remove lead-based paint from the homes of minorities.[110] The disparate economic logics allows for the perpetuation of structural violence.

In using such gender and raced based statistics inequalities not only become reproduced but are *physically* reproduced. The example of lead poisoning demonstrates the structural violence that emerges from this procedure. It becomes more likely that lower income and minority children will continue to suffer from lead paint poisoning because of the lowered incentive to change the behavior. Once a child's health or cognition has been harmed by lead poisoning, the effects are permanent and will continue into adulthood.[111] Children that suffer from lead poisoning often have a drop in cognitive function and in measurable IQ.[112] In a study of fifty thousand elementary school children in Chicago, it was found that low exposure to lead (with a blood lead level as low as 5 μg/dL) were associated

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[110] Rabito, Felicia A., LuAnn E. White, and Charles Shorter. 2004. "From Research to Policy: Targeting the Primary Prevention of Childhood Lead Poisoning". *Association of Schools of Public Health;* Nicholson, Lisa M., Kent P. Schwirian, and Patricia M. Schwirian. "Childhood Lead Poisoning Laws in New York City: Environment, Politics and Social Action." *Children, Youth and Environments*, 2010; Greenberg, Laura. Compensating the Lead Poisoned Child: Proposals for Mitigating Discriminatory Damage Awards, *Environmental Law Review* (2001); Chamallas, Martha, and Jennifer B. Wriggins. *The Measure of Injury: Race, Gender, and Tort Law*. New York, NY: New York University Press, 2010.

[111] Jusko, Todd A., Richard L. Canfield, Charles R. Henderson, and Bruce P. Lanphear. "Comments on "Recent Developments in Low-Level Lead Exposure and Intellectual Impairment in Children"." *Environmental Health Perspectives* 113, no. 1 (2005).
Mazumdar, Maitreyi, David C. Bellinger, Matthew Gregas, Kathleen Abanilla, Janine Bacic, and Herbert L. Needleman. "Low-level Environmental Lead Exposure in Childhood and Adult Intellectual Function: A Follow-up Study." *Environmental Health* 10, no. 1 (2011)

[112] See: Lanphear, B. P. "Cognitive Deficits Associated with Blood Lead Concentrations." *Public Health Reports* 115, no. 6 (2000): 521-29: "As a child's BLL increases from 1 to 10 μg/dL, experts estimate a child may lose anywhere from 3.9 to 7.4 IQ points, but from 10 to 30 μg/dL the decrement is 2.5 to 3.0 IQ points. Low-level chronic exposure may have an even greater effect on IQ than a single instance of very high BLL.1"

with lower scores on reading and math tests.[113] Cognitive impairments can also include impairments to attention and executive function, visuospatial motor functioning, short-term memory, as well as confusion and fatigue.[114] Therefore, these children, as result of their exposure to lead paint, will often perform lower than their potential at birth. They will often perform more poorly in school and are less likely to complete their high school education, amongst other numerous consequences. The low visibility method of calculation based on race and gender ultimately replicates existing inequalities. These children have been injured by the very system tasked with compensation for injury.

There is one judge that has emphasized the individual as opposed to the aggregate in an attempt to offset the discriminatory tables. In a 2015 case, *G.M.M v. Kimpson*, an infant plaintiff, G.M.M. and his mother, who were tenants in a New York basement apartment, alleged that their landlord (defendant) was "liable for the infant's elevated blood-lead levels."[115] The defendant argued that he had "sufficiently encapsulated the hazardous lead-based paint in the apartment," but that the plaintiff's dog had so "severely scratched the walls and the moldings in the apartment" that the lead dust was released.[116]

When Dr. Lentz, the forensic economist for the defense took the stand, he began with the claim that as a Hispanic male, "his future economic loss of earnings

[113] Evens, Anne, Daniel Hryhorczuk, Bruce P. Lanphear, Kristin M. Rankin, Dan A. Lewis, Linda Forst, and Deborah Rosenberg. "The Impact of Low-level Lead Toxicity on School Performance among Children in the Chicago Public Schools: A Population-based Retrospective Cohort Study." *Environmental Health* no. 1 (2015)
[114] Naylor, Michelle. "Lead Poisoning and The Brain: Cognitive Deficits and Mental Illness." *Behavioural Health Sciences, Sydney University,* October 2015.
[115] G.M.M. v. Kimpson, 2015 U.S. Dist. LEXIS 99715 (E.D.N.Y. July 29, 2015)
[116] Ibid.

was lower than that projected by plaintiffs' forensic economist." He based this assessment on National Center for Education Statistics data that showed that "2.1 % of *Hispanic males* held a Master's degree or better in 2013 while 13.1 % held a Bachelor's or higher degrees. It can also be noted that 73.1 % of *Hispanic males* held a high school degree or better."[117] This evidence was introduced to show that G.M.M would probably not have obtained a Bachelor's degree, and perhaps not even a high school diploma. Judge Jack Weinstein engaged this expert, and the following conversation took place (See the full transcript in Appendix K):

> Judge: Before you testify, Doctor, I note that your report relies upon Hispanic males' education statistics.
>
> Forensic Economist: Yes.
>
> Judge: And Hispanic males' academic achievements.
>
> Forensic Economist: Correct.
>
> Judge: On the average.
>
> Forensic Economist: Yes.
>
> Judge: I say that it is unconstitutional to base damages on the characteristics of a person injured as a Hispanic or a member of any other ethnic group. *So all of your answers should be based upon individual characteristics and not the general characteristics of a group, ethnic group*. Is that clear to you?

The demand by Judge Weinstein to remove general data on Hispanic males in favor of answers based upon individual characteristics resulted in a much larger settlement for G.M.M and his mother. Judge Weinstein's approach signals welcome move in that it deals with overt discrimination by the tables and subsequently stops one particular form of structural violence. This thesis proceeded

[117] Ibid.

from the claim that to understand an institution is it critical to first understand the actors that work, live, and exist within its operation. This moment of intervention grounds the abstracted idea of the "legal system" to allow us to understand it as a system of social relations, a system made up of people who are in the process of contesting and interpreting, a system of experts who must navigate the complexity of their position.

It has become clear that for reform to happen this invisible practice must first and foremost be rendered visible. Only once this practice has been made visible will it begin to be a site of activism and contention. In this state of visibility it is possible for tort law to begin the move towards a more holistic and intersubjective approach to valuing bodies.

# Worklife Estimates: Effects of Race and Education

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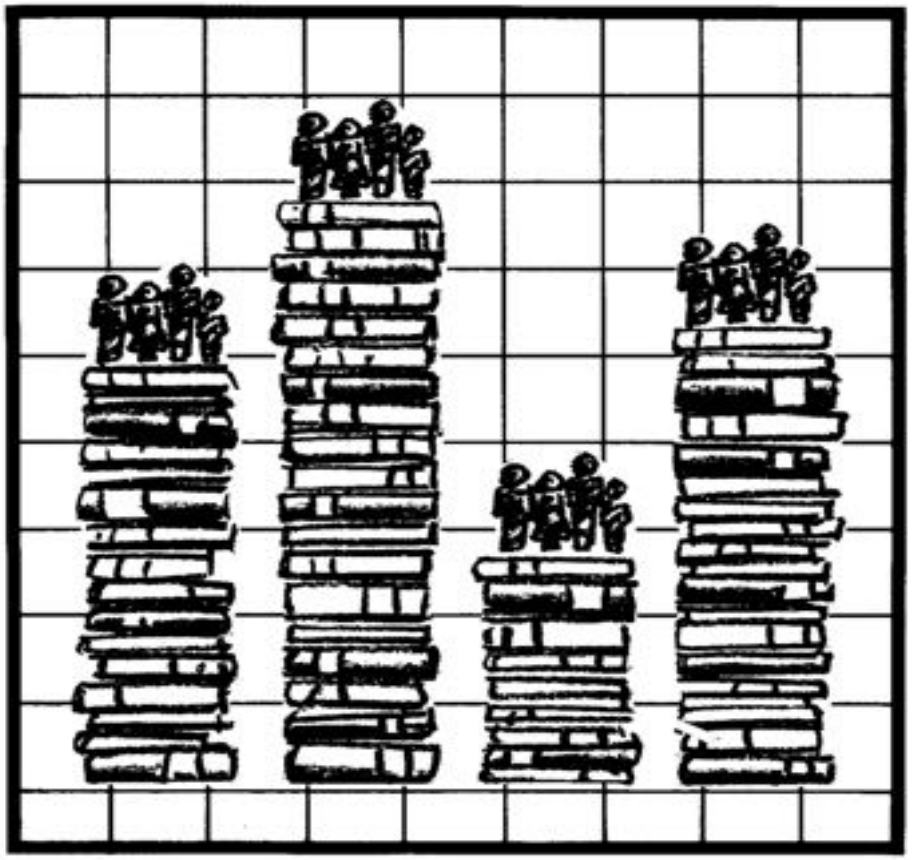
Bulletin 2254



## Preface

This bulletin on new estimates of working life for men and women continues the BLS series begun in 1950, and incorporates methodological improvements introduced in 1982. It contains, in addition to a discussion of changes in worklife expectancy since 1977—first published in the March 1982 *Monthly Labor Review*—updated and expanded worklife tables for 1980, including the effects of race and educational attainment on worklife expectancy.

The author, Shirley J. Smith, is a demographic statistician in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. This bulletin is based on a paper she and Francis W. Horvath, an economist with the Bureau, presented at the 1984 annual meeting of the Population Association of America, Minneapolis, Minnesota. Robert J. McIntire and Jeannette Montgomery, of the Data Services Group, assisted in the preparation of the tables. The text for this bulletin is reprinted from the August 1985 *Monthly Labor Review*, pages 23-30, and includes some data corrections.

# Revised worklife tables reflect 1979–80 experience

*New worklife estimates, based on an expanded sample of individuals, provide more complete measures of labor force behavior than were previously possible; the effects of race and educational attainment on lifetime economic activity are explored for the first time*

SHIRLEY J. SMITH

It is estimated that if mortality conditions and labor force entry and exit rates held constant at levels observed in 1979 to 1980, males born during those years would work about a third longer (38.8 years) over their lifetimes than would their female counterparts (29.4 years). Whites would work considerably longer than blacks and others, with white women working more than 2 years longer and white men nearly 7 years longer than their minority counterparts. The impact of education would be seen not only in occupational choice, but also in the total length of time spent in the labor force. Although remaining in school might delay career entry, those who studied longest would also spend the most years being economically active.

The Bureau of Labor Statistics has been producing worklife estimates for the U.S. population since 1950. Initially, these estimates portrayed workers as being continuously active from the time of initial labor force entry until final retirement. In 1982, after completing a major study of worklife methodology, the BLS published its first set of increment-decrement, or multistate, working life tables for the years 1970 and 1977.[1] Based on observed rates of labor force entry and exit at all ages, those tables for the first time quantified the impact of midlife labor force withdrawal and reentry on worklife duration. Their publication drew responses from many economists involved in litigation of wrongful injury or death cases. Several such responses have been published in the *Monthly Labor Review*,[2] and some of the refinements proposed by readers have since been implemented in BLS worklife research.[3]

This analysis incorporates some of those refinements, updates the 1982 study, and presents a new set of official worklife estimates based on patterns observed during the period 1979–80. It also adds two new dimensions to the discussion, for the first time exploring how race and educational background affect lifetime labor force behavior.

## Method of the new study

As was the case with previous BLS worklife estimates, the new figures have been calculated from information collected in the Current Population Survey (CPS), a nationwide monthly household survey conducted by the Bureau of the Census on behalf of the BLS.[4] Individuals are interviewed during each of 4 successive months, and again in the same 4 months of the following year. Questions focus on the labor force behavior of household members during the week preceding each interview.

For the period of study, CPS records have been matched so that each person's status at the beginning and end of a 12-month interval can be compared. Labor force transitions

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have been registered if labor force status changed between the two reference dates. Transition rates have been developed for each age, sex, race, and educational category to identify the group's unique pattern of labor force mobility.

The worklife tables for 1977 were derived from a single matched sample of about 40,000 persons, interviewed in January 1977 and again in January 1978. To provide the additional demographic detail presented below, the current study pools six matched samples focusing on individuals' labor force status in a given month of 1979 and in the same month of 1980. Specifically, the study focuses on persons interviewed in the following months of each of the 2 years: January, March, May, July, September, and November. Together the six samples include nearly 255,000 matched responses.[3]

The multistate working life table model is extremely sensitive to rapid changes in rates of labor force entry or withdrawal. Tables based on a recessionary period, during which labor force exits increase, present a very bleak picture of lifetime labor force involvement. Conversely, those calculated during periods of rapid recovery or expansion tend to overstate the average degree of lifetime labor force attachment. To avoid the problems caused by the cyclical swings of the early 1980's, the current study rests on data for a somewhat earlier but less turbulent period, 1979 to 1980.

The cost of avoiding cyclical irregularities in this way is that certain secular trends may be understated. To the extent that underlying patterns of male and female labor force involvement have converged since 1980, the sex differentials in this report may overstate those now in evidence. However, until it is possible to update the tables again, the 1979–80 period has been judged the most viable for calculation of multistate worklife estimates.

## Factors affecting worklife duration

In the working life tables for 1970 and 1977, worklife duration was treated as if it were a simple function of sex and age. Tables were prepared separately for men and women, giving no additional demographic or functional detail by race, educational attainment, occupation, or other characteristics that might distinguish high from low turnover groups.

In reality, labor force attachments are influenced by a variety of factors, including training, health, marital and family responsibilities, economic opportunity, and additional sources of income. However, it is not feasible to control for all of these factors in computing worklife expectancy. For example, while worklife estimates by occupation are in particular demand, it would require development of a clustering scheme for occupations by prevailing work patterns, together with study of job changes among potentially hundreds of occupations, to compute them. The only other approach is to assume that no such changes occur.[5] Because neither of these alternatives is practical, no such estimates are computed. Nonetheless, this study does add two new dimensions to the estimation of worklife: race and education. Tables are presented separately for each of these two variables. However, the combined impact of race and education has not been computed because the present matched sample is too limited to develop reliable joint probabilities.

Working life tables show the combined effects of mortality and labor force mobility rates on lifetime labor force involvement. The mortality estimates used in this report are averages of the 1979 and 1980 values released by the National Center for Health Statistics.[7] Tables by race incorporate the effects of sex- and race-specific mortality. Those focusing on education employ only sex-specific rates, because there are no comparable mortality tables by education. Of course, access to health care is apt to be correlated with schooling. If it were possible to quantify this relationship, the tables would probably show still wider discrepancies between the worklives of the less and more educated.

Apart from the factors listed above, all of which affect the behavior of workers, certain properties of the data may also influence our perception of that behavior. Model assumptions and sample design are two such factors. The BLS worklife model has changed little since 1977; it should cause no marked discontinuities.[8] However, the expanded sample, in which subsets are observed at six different points during the year, captures more labor force mobility than was evident in the earlier tables. In particular, the new sample includes two groups of persons whose labor force behavior was observed, retrospectively, in May and July of each of the 2 years. This is the period during which students and seasonal workers are most likely to report themselves as economically active.

Neither worklife expectancies nor net flows appear to have changed greatly between 1977 and the end of the decade. But rates of labor force accession and separation rose noticeably. Because of modification of the sample, such differences should not be interpreted as an accurate reflection of "changes" in mobility rates.

## Developments between 1977 and 1979–80

The general relationships observed in earlier worklife tables remained valid through the end of the 1970's. Women continued to have higher probabilities of labor force exit and reentry than men. Consequently, men continued to have longer worklives, on average, than women. (See table 1.) Not surprisingly, the worklife expectancy of persons in the labor force was higher than that of the inactive population. The gap was small for young persons, but widened considerably with age. Men who were in the labor force at age 50 could expect to work 4.8 years longer than other men at that age. The comparable figure for women was 4.5 years.

Between 1977 and 1980, the cross-sectional participation rates of men changed very little. (See table 2.) Those of older teenagers and men above the age of 55 dropped slightly. In contrast, the activity rates of women continued to climb. There was an overall gain of more than 3 percentage points,

**Table 1. Worklife expectancy of the population, 1970 and 1977, and of all persons by labor force status in 1979–80, by sex and age**

(in years)

| Sex and age | Worklife expectancy of the population | | Worklife expectancy by current labor force status, 1979–80 | | |
|---|---|---|---|---|---|
| | 1970 | 1977 | Total | Active | Inactive |
| **Men** | | | | | |
| 0 | 37.8 | 37.9 | 38.8 | — | 38.8 |
| 16 | 38.7 | 38.5 | 39.1 | 39.8 | 38.3 |
| 20 | 37.3 | 38.8 | 36.8 | 37.4 | 35.7 |
| 25 | 34.4 | 33.4 | 33.1 | 33.5 | 31.8 |
| 30 | 30.5 | 29.2 | 28.3 | 29.2 | 27.1 |
| 35 | 26.1 | 24.7 | 24.5 | 24.8 | 22.8 |
| 40 | 21.7 | 20.3 | 20.0 | 20.4 | 18.0 |
| 45 | 17.4 | 15.9 | 15.7 | 15.3 | 11.8 |
| 50 | 13.4 | 11.7 | 11.6 | 12.3 | 7.5 |
| 55 | 9.5 | 7.8 | 7.8 | 8.7 | 4.2 |
| 60 | 6.0 | 4.3 | 4.4 | 5.7 | 2.2 |
| 65 | 3.1 | 1.8 | 2.2 | 4.1 | 1.2 |
| 70 | 1.4 | .8 | 1.2 | 3.2 | .4 |
| 75 | .6 | .5 | .6 | 1.7 | .0 |
| **Women** | | | | | |
| 0 | 32.2 | 37.5 | 39.4 | — | 39.4 |
| 16 | 33.5 | 37.7 | 39.3 | 39.1 | 39.7 |
| 20 | 31.3 | 36.0 | 37.2 | 37.9 | 36.1 |
| 25 | 28.0 | 33.0 | 34.3 | 34.8 | 33.6 |
| 30 | 24.7 | 29.9 | 31.8 | 31.7 | 29.1 |
| 35 | 21.6 | 26.8 | 27.6 | 28.6 | 25.7 |
| 40 | 18.3 | 23.7 | 24.3 | 25.5 | 22.1 |
| 45 | 14.9 | 20.5 | 21.1 | 22.3 | 18.4 |
| 50 | 11.5 | 17.5 | 18.0 | 19.0 | 14.9 |
| 55 | 8.2 | 14.8 | 15.2 | 16.0 | 11.9 |
| 60 | 5.1 | 12.5 | 12.8 | 13.6 | 9.7 |
| 65 | 3.1 | 11.1 | 11.4 | 12.1 | 8.4 |
| 70 | 1.4 | 10.1 | 10.3 | 10.9 | 7.9 |
| 75 | .5 | 9.1 | 9.3 | 9.8 | 7.3 |

with the largest change occurring in the age range 25 to 54. This change in cross-sectional rates signaled shifts in the underlying patterns of labor force involvement. However, because the multistate model builds on flow data (that is, entry and exit rates) rather than stocks (activity rates), the relationship between changes in activity rates and worklife values is sometimes weak.[9]

During the period in question, the observed participation rate for men 16 and older edged downward from 77.7 percent to 77.4 percent, while their worklife expectancy rose by .6 years. Worklife expectancies held steady for men aged 55 to 64, despite a modest drop in activity rates. Further, despite the observed drop in participation rates of those 65 and older, worklife expectancies for these men actually rose slightly as life expectancy increased.

Among women 16 and older, whose total activity rate rose by 3.1 percentage points, worklife duration increased by 1.8 years. The fact that expectancies rose across the board indicates that women of all ages were developing a stronger bond with the job market.

The relationship between lifespans and worklife expectancies is particularly revealing. (See table 3.) Between 1977 and the end of the decade, the life expectancy of the average 20-year-old man rose by half a year. His worklife expectancy went unchanged, the entire gain being allocated to nonmarket activity. Women of the same age also gained a half year of life, but allocated this additional time to labor force activity and reduced nonmarket time by an average of .7 years, for a total worklife gain of 1.2 years. As a result, the sex differential in worklife continued to narrow. Whereas in 1977 the 20-year-old woman could expect to work 70.7 percent as long as her male counterpart, by 1979–80 the ratio had risen to 73.9 percent.

The trend toward earlier retirement observed between 1970 and 1977 appeared to have leveled off in the closing years of the decade. The worklife expectancy of 65-year-old men, which had dropped from 3.1 years in 1970 to 1.9 in 1977, was 2.3 years by the end of the decade. (See table 4.) For women of a comparable age, the figure had dropped from 1.4 to 1.1 years, but stood at 1.5 years by 1979–80. The model's insensitivity to hours of work makes it difficult to interpret these changes. They may well reflect the impermanence of many retirement decisions, and the fact that so-called retirees often resume part-time jobs for either economic or social reasons.[10]

The new tables show little change in the proportion of persons expected to die while economically active. (See table 4.) In 1977, the figures for men and women were 27.0 percent and 9.5 percent, respectively, compared with 27.4 percent and 10.4 percent for 1979–80.

## Differentials by race and education

Although expansion of the data base for the present study has obscured our view of changing labor force mobility rates, this loss has been more than offset by an improved perspective on racial and educational differentials. Data users have long pressed for more focused tables, and the new estimates should meet some of their more urgent needs.

Life table models derive their estimates of lifetime behavior not from panel studies but from a series of cross-sectional surveys collected during a single year. Each age

**Table 2. Annual average civilian labor force participation rates by sex and age, 1977 and 1980**

(in percent)

| Sex and age | 1977 | 1980 | Change, 1977–80 |
|---|---|---|---|
| Men, total | 77.7 | 77.4 | -.3 |
| 16–17 | 50.3 | 50.1 | -.2 |
| 18–19 | 72.5 | 71.3 | -1.2 |
| 20–24 | 85.7 | 85.9 | .2 |
| 25–34 | 95.4 | 95.2 | -.2 |
| 35–44 | 95.7 | 95.5 | -.2 |
| 45–54 | 91.2 | 91.2 | — |
| 55–64 | 74.0 | 72.1 | -1.9 |
| 65 and over | 20.1 | 19.8 | -.3 |
| Women, total | 48.4 | 51.5 | 3.1 |
| 16–17 | 43.2 | 43.6 | .4 |
| 18–19 | 60.5 | 61.9 | 1.4 |
| 20–24 | 66.1 | 68.5 | 2.4 |
| 25–34 | 59.5 | 65.5 | 6.0 |
| 35–44 | 59.6 | 63.5 | 3.9 |
| 45–54 | 55.8 | 59.9 | 4.1 |
| 55–64 | 41.3 | 41.3 | .2 |
| 65 and over | 8.1 | 8.1 | — |

group in the population being analyzed contributes a single year of life to the synthetic whole. It is possible to derive group-specific estimates only if the group is closed to entry and exit. If its members remain so classified for life, the experiences of older persons can be used to derive a synthetic "future" for the young.

In the new tables, the population is subdivided by sex, race, and educational attainment. While subject to misclassification, each of these traits is normally fixed during the adult years. Sex and race are particularly stable, and beyond the mid 20's, education—especially as classified here—is also relatively fixed. Only persons who already have some advanced training are likely to continue schooling, and attainment levels, once achieved, cannot be lost. Because these groupings are closed, they satisfy the constraints of the model. And because they relate closely to labor force behavior, they are substantively meaningful controls.

The specific categories of tabulation have been dictated by sample size and population distribution. The two racial categories displayed are white (88 percent of the sample) and blacks and others (12 percent). A separate set of tables details years of schooling completed, using the categories of less than high school (about 20 percent of the sample), high school graduate to 14 years (about 52 percent of the sample), and 15 years or more (about 28 percent). At older ages, the sample of highly educated persons is very thin, particularly for women. This has made the more conventional cutoff of a college degree impossible to implement.

*Race.* Because the two components of worklife estimates, mortality and labor force behavior, are known to vary by race, the estimates themselves must also do so if appropriately tabulated. The new tables based on 1979–80 data now allow us to quantify the lifetime relationship between race and labor force involvement. As might be expected, the impact is striking, particularly for men.

Consider first the probabilities of moving into and out of the labor force. Among all men ages 16 to 64 who are outside the job market, whites are more likely to enter than are their minority counterparts. (See table 5.) Among those already in the labor force, blacks and others are the more likely to withdraw. The pool of inactive minority members is thus disproportionately large and contributes to a high incidence of labor force mobility at all ages.

The result is that minority men are estimated to average 4.3 labor force entries and 3.9 withdrawals per lifetime, while white men average 3.9 entries and 3.6 withdrawals. (See table 4.) Based on the observations for the reference period, the worklife expectancy of blacks and others was nearly 7 years shorter than that of whites (32.9 years vs. 39.8 years). Minority men spent an average of just 50 percent of their lives in labor force activity, compared with 56 percent for whites. This difference was all the more striking because whites tended to live longer, allowing them greater potential for both a longer worklife and post-retirement leisure. Far more blacks and others were likely to die before retirement (31.7 percent as against 26.7 percent for whites).

**Table 3. Changes in life and worklife expectancies by sex, selected years, and changes from 1977 to 1979–80**

| Worklife model, sex, and year | Life expectancy | | Worklife expectancy | | | Inactive years (total population) | | Percent of lifespan active | | Ratio of female to male worklife expectancies at age 20 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | All persons | | Workers | | | | | |
| | At birth | At age 20 | At birth | At age 20 | At age 20 | From birth | From age 20 | From birth | From age 20 | |
| **Men** | | | | | | | | | | |
| Conventional model: | | | | | | | | | | |
| 1900 | 46.3 | 42.2 | 32.1 | 27.8 | 28.4 | 14.2 | 4.4 | 69.2 | 65.8 | (1) |
| 1940 | 61.2 | 48.8 | 36.1 | 30.7 | 41.3 | 25.1 | 7.1 | 62.3 | 64.8 | (1) |
| 1950 | 65.5 | 48.9 | 41.5 | 41.4 | 43.1 | 24.0 | 7.5 | 63.4 | 84.7 | (1) |
| 1960 | 66.8 | 49.8 | 41.1 | 40.8 | 42.3 | 25.7 | 8.7 | 61.5 | 82.0 | (1) |
| Increment-decrement model: | | | | | | | | | | |
| 1970 | 67.1 | 49.5 | 37.8 | 37.3 | 38.0 | 29.4 | 12.3 | 56.3 | 75.2 | (1) |
| 1977 | 69.3 | 51.3 | 37.9 | 36.5 | 37.3 | 31.5 | 14.5 | 54.7 | 71.7 | (1) |
| 1979–80 | 70.0 | 51.8 | 38.8 | 38.0 | 37.4 | 31.2 | 13.8 | 55.4 | 73.0 | (1) |
| Change, 1977 to 1979–80 | .7 | .5 | .9 | .6 | -.1 | -.3 | .5 | .7 | -.7 | (1) |
| **Women** | | | | | | | | | | |
| Conventional model: | | | | | | | | | | |
| 1900 | 48.3 | 43.8 | 6.3 | (2) | (2) | 42.0 | (2) | 13.0 | 13.7 | (2) |
| 1940 | 65.7 | 50.4 | 12.1 | 11.9 | (2) | 53.6 | 38.5 | 18.4 | 23.6 | 30.8 |
| 1950 | 71.0 | 53.7 | 15.1 | 14.5 | (2) | 55.9 | 39.2 | 21.3 | 27.0 | 33.8 |
| 1960 | 73.1 | 55.7 | 20.1 | 19.6 | 37.3 | 53.0 | 37.1 | 27.5 | 35.4 | 45.8 |
| Increment-decrement model: | | | | | | | | | | |
| 1970 | 74.8 | 56.7 | 22.8 | 21.3 | 22.1 | 52.4 | 35.4 | 29.8 | 37.6 | 57.1 |
| 1977 | 77.1 | 58.6 | 27.5 | 26.0 | 26.7 | 49.7 | 32.6 | 35.7 | 44.4 | 70.7 |
| 1979–80 | 77.6 | 58.1 | 28.4 | 27.2 | 27.9 | 48.2 | 31.9 | 37.0 | 46.0 | 73.9 |
| Change, 1977 to 1979–80 | .5 | .5 | 1.0 | 1.2 | 1.2 | -1.5 | -.7 | 2.2 | 1.6 | 3.2 |

[1] Not applicable.
[2] Data not available.

**Table 4. Selected worklife indices by sex, 1970, 1977, and 1979–80, and by sex, race, and years of schooling completed, 1979–80**

(In years, unless otherwise indicated)

| Index and age | Men | | | | | | | | Women | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | | 1979–80 | | | | | Total | | | 1979–80 | | | |
| | | | | Race | | Schooling completed | | | | | | Race | | Schooling completed | | |
| | 1970 | 1977 | 1979–80 | White | Blacks and others | Less than high school | High school to 14 years | 15 years or more | 1970 | 1977 | 1979–80 | Whites | Blacks and others | Less than high school | High school to 14 years | 15 years or more |
| Life expectancy: | | | | | | | | | | | | | | | | |
| At birth | 67.1 | 69.5 | 70.8 | 70.7 | 65.3 | 70.0 | 70.0 | 70.3 | 74.8 | 77.1 | 77.6 | 78.3 | 73.9 | 77.6 | 77.6 | 77.6 |
| At age 25 | 45.1 | 46.8 | 47.3 | 47.9 | 43.3 | 47.3 | 47.3 | 47.3 | 51.9 | 53.8 | 54.2 | 54.7 | 51.0 | 54.2 | 54.2 | 54.2 |
| At age 60 | 16.1 | 17.8 | 17.5 | 17.6 | 16.5 | 17.5 | 17.5 | 17.5 | 20.6 | 22.1 | 22.4 | 22.6 | 21.0 | 22.4 | 22.4 | 22.4 |
| At age 65 | 13.1 | 13.9 | 14.2 | 14.3 | 13.8 | 14.2 | 14.2 | 14.2 | 17.0 | 18.3 | 18.5 | 18.7 | 17.7 | 18.5 | 18.5 | 18.5 |
| Worklife expectancy:[1] | | | | | | | | | | | | | | | | |
| At birth | 37.8 | 37.9 | 38.8 | 38.8 | 32.8 | [2]34.6 | [2]39.5 | [2]41.3 | 22.3 | 27.5 | 29.4 | 29.7 | 27.4 | [2]22.3 | [2]30.1 | [2]34.9 |
| At age 25 | 34.0 | 33.4 | 33.1 | 33.6 | 29.6 | 29.2 | 33.8 | 36.1 | 19.0 | 23.0 | 24.8 | 24.1 | 23.5 | 17.9 | 24.4 | 27.9 |
| At age 60 | 6.0 | 4.3 | 4.4 | 4.5 | 3.3 | 3.3 | 4.7 | 6.3 | 3.1 | 2.5 | 3.0 | 3.0 | 3.0 | 2.3 | 3.2 | 3.5 |
| At age 65 | 3.1 | 1.9 | 2.3 | 2.3 | 1.8 | 1.8 | 2.4 | 3.0 | 1.4 | 1.1 | 1.5 | 1.5 | 1.5 | 1.2 | 1.8 | 1.8 |
| Percent of life economically active:[2] | | | | | | | | | | | | | | | | |
| From birth | 56.3 | 54.7 | 55.4 | 56.3 | 50.4 | 49.4 | 57.0 | 58.7 | 29.6 | 35.7 | 37.9 | 37.9 | 37.1 | 28.7 | 38.6 | 45.0 |
| From age 25 | 76.3 | 71.4 | 70.0 | 72.6 | 66.1 | 61.7 | 71.5 | 75.3 | 36.6 | 47.8 | 44.3 | 44.1 | 46.1 | 33.0 | 43.0 | 51.5 |
| From age 50 | 37.3 | 29.3 | 25.1 | 25.6 | 25.0 | 18.9 | 26.0 | 30.0 | 14.9 | 11.3 | 13.4 | 13.3 | 14.3 | 10.3 | 14.7 | 17.8 |
| From age 65 | 23.7 | 13.7 | 16.2 | 16.1 | 13.0 | 12.7 | 16.8 | 20.4 | 9.2 | 6.0 | 8.1 | 8.0 | 8.5 | 6.5 | 9.7 | 9.7 |
| Labor force entries per: | | | | | | | | | | | | | | | | |
| Person born | 2.9 | 3.0 | 3.0 | 3.0 | 4.3 | 4.3 | 3.7 | 4.6 | 4.6 | 4.5 | 5.5 | 5.6 | 5.4 | 5.8 | 5.6 | 5.6 |
| Person age 25 | 1.2 | 1.1 | 1.3 | 1.5 | 1.8 | 2.0 | 1.5 | 1.4 | 2.8 | 2.7 | 3.0 | 3.0 | 3.1 | 3.3 | 3.2 | 2.7 |
| Expected duration per entry remaining: | | | | | | | | | | | | | | | | |
| From birth | 13.0 | 12.6 | 9.9 | 10.2 | 7.7 | 8.8 | 10.8 | 8.9 | 4.8 | 6.1 | 5.3 | 5.3 | 5.1 | 3.8 | 5.4 | 6.2 |
| From age 25 | 29.4 | 29.1 | 22.1 | 22.5 | 15.9 | 14.6 | 22.5 | 25.8 | 6.6 | 8.6 | 8.0 | 8.0 | 7.6 | 5.4 | 7.8 | 10.3 |
| Voluntary exits remaining: | | | | | | | | | | | | | | | | |
| At birth | 2.6 | 2.7 | 3.6 | 3.6 | 3.9 | 4.6 | 3.8 | 4.3 | 4.5 | 4.4 | 5.4 | 5.5 | 5.4 | 5.7 | 5.7 | 6.7 |
| At age 25 | 1.6 | 1.7 | 2.3 | 2.3 | 2.4 | 2.7 | 2.3 | 2.2 | 3.3 | 3.3 | 3.8 | 3.8 | 3.7 | 3.9 | 4.0 | 3.6 |
| Percent dying while active | 36.3 | 37.6 | 37.4 | 36.7 | 41.7 | 33.0 | 39.6 | 34.3 | 10.6 | 9.5 | 10.4 | 9.7 | 14.8 | 8.0 | 11.2 | 12.4 |

[1] Population-based index.

[2] Years of work expected, if this level of education is attained.

[3] Ratio of worklife to life expectancy at the given age.

Stated differently, although minority men could expect to spend fewer years in the labor force, their additional periods of inactivity were more likely to occur during prime working ages.

The racial differentials in worklife expectancy were less distinct for women. At most ages, it was minority rather than white women who were the more likely to enter the job market, if inactive. (See table 5.) However, they were also the more likely to withdraw from economic activity.

One apparent difference by race involved the childrearing years. Neither black nor white women showed strong tendencies to withdraw from the job market to have children. However, the data pointed toward a "fertility trough," although weak, in the labor force attachment of white women. Contradicting the patterns observed at other ages, white women in their 30's showed a stronger propensity to leave the labor force than did their minority counterparts, and those 35 to 44 showed a stronger tendency to reenter. Although the timing of midlife labor force withdrawal differed by race, estimates of lifetime entries and exits for the two groups are surprisingly similar. (See table 4.) On balance, white women averaged 2.3 more years of worklife (29.7 years vs. 27.4 years), but this is largely a reflection of their greater longevity.

*Education.* The new tables reveal a clear and direct relationship between years of schooling and duration of labor force involvement. As noted earlier, the size of the differential is probably understated. There has been no attempt to estimate the impact of education on health and survival.

The mechanism whereby education affects worklife duration is probably occupational selection. Although the link between schooling and occupation is imperfect, many occupations are closed to persons who have not met minimum educational requirements. Therefore, breaking the population into three educational strata effectively breaks it into clusters of occupations for which certain levels of training may be necessary.

The new tables reveal a decided employment "payoff" for time spent in school. During the prime working ages, men with 15 or more years of schooling are roughly half as likely to leave the job market, if active, as are those without high school diplomas. (See table 4.) If inactive, their probability of labor force entry is approximately twice that of the least educated group. Over a lifetime, the most educated class of men averages slightly more entries and exits than do those without high school diplomas, but most of this turnover occurs relatively early, while many individuals are still in school. After age 25, these men can

**Table 5. Rates of labor force accession and separation per 1,000 persons at risk, by sex, race, and years of schooling completed, 1979–80**

| Age | Men | | | | | | Women | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Race | | Years of schooling completed | | | Total | Race | | Years of schooling completed | | |
| | | White | Black and other | Less than high school | High school to 14 years | 15 years or more | | White | Black and other | Less than high school | High school to 14 years | 15 years or more |
| | Labor force accessions per 1,000 inactive men | | | | | | Labor force accessions per 1,000 inactive women | | | | | |
| 16–19 | 596.1 | 620.1 | 525.8 | 506.0 | — | — | 507.5 | 564.1 | 439.3 | 425.4 | — | — |
| 20–24 | 666.4 | 673.6 | 649.0 | 611.2 | 710.2 | 665.2 | 454.9 | 457.5 | 462.1 | 326.1 | 457.4 | 566.7 |
| 25–29 | 691.4 | 693.1 | 648.8 | 477.2 | 721.9 | 783.3 | 341.9 | 334.1 | 397.6 | 268.3 | 342.7 | 422.0 |
| 30–34 | 547.1 | 558.1 | 531.6 | 336.1 | 566.3 | 602.2 | 280.3 | 286.3 | 320.6 | 229.8 | 303.3 | 349.3 |
| 35–39 | 457.1 | 464.3 | 306.9 | 271.9 | 453.0 | 757.2 | 271.3 | 274.7 | 248.8 | 195.0 | 247.3 | 330.2 |
| 40–44 | 297.8 | 307.9 | 206.7 | 225.1 | 285.6 | 528.1 | 221.7 | 226.3 | 189.1 | 143.0 | 237.2 | 267.3 |
| 45–49 | 217.7 | 218.5 | 213.2 | 172.9 | 233.2 | 350.6 | 194.1 | 192.9 | 193.1 | 136.2 | 173.4 | 196.8 |
| 50–54 | 168.6 | 175.0 | 138.8 | 133.3 | 213.3 | 260.9 | 122.7 | 120.4 | 141.7 | 102.4 | 127.4 | 155.5 |
| 55–59 | 125.9 | 129.0 | 75.1 | 93.4 | 142.8 | 174.5 | 81.1 | 79.0 | 100.3 | 67.8 | 83.6 | 99.6 |
| 60–64 | 88.6 | 92.0 | 52.9 | 61.4 | 93.7 | 103.9 | 56.4 | 55.0 | 69.7 | 46.4 | 64.3 | 53.4 |
| 65–69 | 75.3 | 75.1 | 76.4 | 56.5 | 76.7 | 95.6 | 41.8 | 40.8 | 50.1 | 37.7 | 47.9 | 38.5 |
| 70–74 | 52.0 | 51.8 | 54.5 | 51.9 | 55.2 | 54.0 | 33.3 | 33.9 | 27.1 | 29.7 | 38.9 | 36.2 |
| 75 and over | 3.9 | 4.2 | 1.9 | 4.7 | 3.7 | 1.2 | 3.1 | 3.2 | 2.2 | 2.8 | 4.1 | 3.7 |
| | Labor force separations per 1,000 active men | | | | | | Labor force separations per 1,000 active women | | | | | |
| 16–19 | 277.6 | 262.9 | 429.2 | 277.6 | — | — | 264.8 | 226.6 | 525.2 | 436.5 | — | — |
| 20–24 | 135.8 | 112.3 | 186.3 | 143.9 | 107.5 | 176.4 | 227.6 | 219.8 | 260.9 | 260.5 | 236.1 | 190.7 |
| 25–29 | 58.6 | 52.6 | 85.8 | 96.9 | 58.9 | 56.1 | 145.8 | 134.5 | 184.4 | 300.3 | 181.9 | 153.3 |
| 30–34 | 36.7 | 33.5 | 65.0 | 56.4 | 36.8 | 36.9 | 154.5 | 157.9 | 140.7 | 247.3 | 160.2 | 121.4 |
| 35–39 | 30.0 | 27.7 | 52.0 | 52.4 | 30.0 | 21.8 | 128.5 | 129.1 | 124.8 | 198.0 | 133.0 | 94.9 |
| 40–44 | 30.8 | 28.8 | 49.7 | 51.3 | 27.3 | 25.0 | 111.2 | 109.8 | 119.8 | 157.1 | 114.6 | 78.2 |
| 45–49 | 36.6 | 34.1 | 56.1 | 56.4 | 35.0 | 28.3 | 109.7 | 109.1 | 112.8 | 145.8 | 114.3 | 70.5 |
| 50–54 | 53.1 | 48.3 | 85.6 | 69.2 | 48.4 | 36.4 | 114.7 | 113.8 | 122.6 | 153.5 | 111.6 | 86.0 |
| 55–59 | 68.9 | 66.3 | 127.2 | 133.6 | 61.8 | 71.2 | 151.3 | 149.8 | 186.1 | 192.0 | 143.0 | 126.3 |
| 60–64 | 232.5 | 227.5 | 386.5 | 296.3 | 225.6 | 160.6 | 253.5 | 252.4 | 262.8 | 275.9 | 249.4 | 238.6 |
| 65–69 | 327.9 | 332.4 | 286.7 | 406.0 | 325.2 | 246.2 | 329.4 | 333.2 | 300.9 | 352.3 | 335.4 | 322.7 |
| 70–74 | 361.8 | 366.3 | 274.2 | 443.1 | 367.5 | 277.3 | 364.5 | 377.4 | 426.8 | 417.1 | 366.3 | 317.4 |
| 75 and over | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 | 1000.0 |

anticipate fewer transitions in either direction.

Over a lifetime, the average man with 15 years of schooling or more can expect to work 6.5 years longer than his classmate who left high school before graduation (41.1 vs. 34.6). The same increment to education will have twice as much impact on the worklife duration of a woman, adding an average of 12.6 years to her economically active life (34.9 vs. 22.3 years).

Table 6 isolates the impact of education during three periods of the worklife cycle: the early and middle phases and the preretirement years. It displays the number of years the average person can be expected to work during each such phase, by sex and years of schooling completed.

At younger ages, education has a two-pronged effect on men: While failure to earn a high school diploma costs the individual about a year and a half of worklife between the ages of 20 and 39, remaining in school also imposes a cost in terms of forgone employment opportunities. However, among the group ages 40 to 59, the payoff from education is very evident. Those completing 15 years of school or more can expect to work 1 year longer than high school graduates, and 3 years longer than those who did not graduate. Even though higher education, with its greater compensation returns, may ease the financial strain of retirement, it seems to engender a sense of "career commitment" in many men which holds them in the labor force. (This is evident in the separation rates in table 5.) Examples of this phenomenon include self-employed career professionals such as attorneys and physicians, who are reputed to remain active long after most wage and salary workers have retired. An additional effect of schooling seems to be that—among those who have "retired," at least in terms of their principal job—the most educated are the most likely to return to work in some capacity, as reflected in accession rates. Finally, if educational attainment is positively correlated with good health and longevity, untreated health problems may discourage economic activity among the least educated, least

**Table 6. Worklife expectancy of the population between specific ages,[1] by sex and years of schooling completed, 1979–80**

| Sex and years of schooling completed | Age | | |
|---|---|---|---|
| | 20 to 39 | 40 to 59 | 60 and over |
| Men, total | 17.6 | 16.3 | 4.4 |
| Less than high school | 16.0 | 14.5 | 3.4 |
| High school to 14 years | 17.9 | 16.6 | 4.7 |
| 15 years or more | 17.6 | 17.5 | 6.3 |
| Women, total | 13.1 | 11.6 | 3.0 |
| Less than high school | 9.5 | 8.8 | 2.3 |
| High school to 14 years | 13.1 | 11.8 | 3.4 |
| 15 years or more | 14.0 | 14.7 | 3.5 |

[1] Computed using the difference in worklife remaining at ages 20, 40, and 60, divided by survivors to each initial age.

affluent groups, further widening the worklife gap associated with schooling. Thus, in the final phase of the work cycle, the most educated group remain active 1.6 years longer than high school graduates and 3 years longer than those who never finished high school.

The work patterns of women vary more widely than those of men. Consequently, education has a stronger potential impact on female worklife behavior than on that of males. The new tables show this effect to be the greatest during the prime working ages. Between the ages of 20 and 39, women face fundamental tradeoffs among schooling, child-rearing, and employment. The opportunity costs of child-rearing increase with job skills. During this phase of life, the woman with 15 years of schooling or more is likely to work nearly a year longer than the high school graduate, and 4.5 years longer than her classmate who left high school early. The differential remains, and in fact widens, throughout midlife. During the next 20 years of her life cycle, the highly educated woman is likely to work 2.9 years longer than the high school graduate, and 5.9 years longer than the nongraduate. The tables suggest that the relationship between education and retirement patterns is looser for women than for men. As with men, the most educated show the least inclination to retire early. (See table 5.) However, once they have done so, these women are less likely than men with comparable training to reverse their decision. (As evidence, compare accession rates of the most educated men and women in table 5.)

## Conclusions

This latest worklife study, based on a larger sample of individuals than had been used previously, has enabled us to examine two new dimensions of worklife behavior. It has also provided more complete measures of movement into and out of the labor force than were previously possible.

During the period between 1977 and 1979–80, the worklife expectancy of adult men held relatively steady, while that of women continued to edge upward. For both sexes, there were indications that many retirement decisions were being reversed. However, because the model does not measure hours of labor force involvement, the workyears remaining to older persons may in fact be less "intense" now than they were at the beginning of the decade.

Race seems to have more bearing on the worklife patterns of men than of women. The tables confirmed that minority men are both more likely to leave the labor force and less likely to reenter than are whites. The racial differential for women affects timing of movement more than it does overall volume.

The more important factor affecting worklife patterns of women is educational attainment. Using the categories displayed here, we find that women appear to reap twice as much "payoff" from additional schooling as do men. Their additional training appears to drive up the opportunity costs of alternative activities, encouraging longer and more continuous careers for those who have pursued higher education.

Opportunity costs also appear to play an important role in the retirement process. For both sexes, higher education is associated with later retirement. Among the men who do retire, the most educated are most prone to reenter the work force. The swifter, more permanent retirement pattern of persons without high school diplomas may be due, in part, to health differentials by educational attainment, mentioned but not fully controlled for in this study. □

# APPENDIX B: MARKOV WORKLIFE EXPECTANCY MODEL



E. Why use the Markov assumption?

One uses the Markov assumption because the individual is judged to be reasonably representative of the class, or for lack of anything better. To be applied to real life, a model is constrained to use only the information that is available.

In practice, even if you know a lot more about the people in the sample than is used in *WLE* tables, there won't be enough of them to be able to divide them into groups by detailed combinations of race, level of education, occupation, health habits, etc., to get reliable estimates of transition probabilities for these fine groupings.[1] Alternatives to the Markov model are discussed in Part V, below.

## II. The Elementary Mathematics of Worklife Expectancy Tables

A. Definition of life expectancy

Standard actuarial calculations are performed for a *stationary population*: a mental construct based on the assumptions, first that the number of births is constant from year to year and second, for each age the probability of death is constant over time, so that the age distribution of the population is constant over time. A standard simplifying assumption is that on the average those who die between integer age $x$ and $x + 1$ will die at age $x + 0.5$. Where $\ell_x$ represents the number in a stationary population living at exact age $x$, the average number of people alive over the 12 months after the $x$th birthday is $(\ell_x + \ell_{x+1})/2$. This is also the total number of years lived during that year by the $\ell_x$ people alive at the beginning of the year, which we record as:[2]

$$L_x = (\ell_x + \ell_{x+1})/2. \tag{1}$$

Add the total number of years to be lived over all future ages by those aged $x$ today, divide by the number in the cohort at age $x$, and the result is the life expectancy: the average number of years yet to be lived by a person who is exactly $x$ years old today. In symbols,

$$e_x \equiv \sum_{t=x}^{\omega} L_t \Big/ \ell_x \equiv T_x/\ell_x \tag{2}$$

Here ω (omega) represents the oldest age to which anyone lives, and $T_x$ represents the sum of $L_t$, for $t = x$ to ω. The equal sign with three bars, or identity symbol, may be read "is identically equal to," or "equals by defini-

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[1] Richards and Abele (1999) have presented a *WLE* table based on the Markov model that combines race, Hispanic origin, and education; see their Table 4. They also present *WLE* tables using the method used by BLS prior to 1982 that give much finer detail including smoking status and occupation. A discussion of the relative advantages of the older methodology and the Markov model is beyond the scope of this paper; see Smith (1982a), Richards (2000), and Skoog and Ciecka (2004).

[2] $\ell_{x+1}$ live through the year, and $\ell_x - \ell_{x+1}$ die during the year, living for 1/2 year on average. So $L_x = \ell_{x+1} + (\ell_x - \ell_{x+1})/2$, which can be re-arranged to give equation (1) in the text.

# APPENDIX B: MARKOV WORKLIFE EXPECTANCY MODEL



tion." The life expectancy tables for the U.S. population, published annually by the National Center for Health Statistics, provide columns for (among others) $\ell_x$, $L_x$, and $T_x$ in addition to the resulting life expectancy, $e_x$ (see Arias, 2004, Table 1). The cohort under consideration could be all people of age $x$, all males, all females, or subgroups classified by race, education, or any other characteristic(s) considered relevant provided they may reasonably be assumed to remain the same as the individual ages.

The link between numbers living at the beginning and end of the year depends on the probability of death during the year after attaining age $x$, $q_x$. The link is given by:

$$\ell_{x+1} = \ell_x \cdot (1 - q_x). \tag{3}$$

B. Definition of worklife expectancy

Actuaries embroider symbols with subscripts and superscripts, before and after the primary symbols. The people living at exact age $x$ may be classified into those who are active, ${}^{*}\ell_x$, and those who are inactive, ${}^{i}\ell_x$. In the worklife table context it is customary to write ${}^{*}\ell_x$ to represent what is denoted in the life table context by $\ell_x$:

$$\ell_x = {}^{*}\ell_x = {}^{*}\ell_x + {}^{i}\ell_x. \tag{4}$$

The pre-superscript dot signals that all states for living members of the system, active and inactive, are included. In the BLS tables, "active" means "in the (civilian) labor force," whether employed or unemployed. "Inactive" means "not in the labor force," that is to say neither working nor actively looking for work.

Worklife expectancy at age $x$ is then defined as the average number of years that a cohort of age $x$ will be in the labor force, before they either retire permanently or die. Thus a first point to notice is that worklife expectancy does not tell us how many years a person can be expected to *work* in the future, but rather how many years he or she can be expected to either *work or look for work*.[3] A second point is that no distinction is made between full-time and part-time work. A person who was "economically active" –that is working or looking for work, full- or part-time–at some time during the week before the interview (the reference week) is classified as in the labor force.[4]

Those in the labor force are on the average healthier than the rest of the population, so rates of mortality undoubtedly differ between the two groups. However no mortality table records these differences, so the worklife expec-

[3]It would be feasible to measure employed v. unemployed or inactive rather than active v. inactive, and below we refer to studies that do so (see Flinn and Heckman, 1981 and Millimet, et al., 2002). The BLS made a judgment that those who are unemployed but actively looking for work would behave more like the employed than like those who are not in the labor force.

[4]To be classified as unemployed, one must have had no employment in the reference week but been available for work, except for temporary illness, and searched for work sometime during the four previous weeks. Persons waiting to be recalled from layoff need not have been searching.

# APPENDIX B: MARKOV WORKLIFE EXPECTANCY MODEL



tancy tables assume that the active and inactive populations face the same probability of dying.

Those who are active at both the beginning and end of the year, called *actives*, are assumed to be active all year. Those who are active at the beginning and inactive at the end of the year, called *exits or separations*, are assumed (on the average) to be active for half a year; the same assumption is made for those who are inactive at the beginning but active at the end, called *entrants or accessions*. Those who are inactive at both the beginning and the end of the year, called *inactives*, are assumed to be inactive all year.

We assume that entrants and exits change their status, on the average, in the middle of the year, so just as in equation (1), the total number of active years lived during the year by the ${}^{\cdot a}\ell_x$ individuals alive at the beginning of the year is given by:

$$ {}^{\cdot a}L_x = \left( {}^{a}\ell_x + {}^{a}\ell_{x+1} \right) / 2 . \tag{5} $$

Add the total number of active years to be lived over all future ages by those aged $x$ today, divide by the number in the pool at age $x$, and the result is the worklife expectancy. In symbols,

$$ {}^{\cdot}e_x^{\cdot} = \sum_{t=0}^{\infty} {}^{\cdot}L_{x+t}^{\cdot} \Big/ {}^{\cdot}\ell_x . \tag{6} $$

The dots in the pre-superscripts remind us that the definition is for the average worklife expectancy of an individual at age $x$ without regard to current labor-force status. After the development through (12) below, this may be shown to be a weighted average of the worklife expectancies for those who start as active at age $x$, and those who start as inactive.

If a forensic economist is applying worklife expectancy to an individual, (6) is the appropriate concept to use for a child not yet old enough to be in the labor force, or for an adult whose labor-force status is unknown. But it is not appropriate to apply ${}^{\cdot}e_x^{\cdot}$ to an individual whose labor-force status is known.

The appropriate worklife expectancy concept when labor-force status at age $x$ is known is ${}^{a}e_x^{\cdot}$, if active, or ${}^{i}e_x^{\cdot}$, if inactive–the symbols are defined at (9) and (12). Worklife expectancy for those in the labor force will be higher than for those who are not. Calculations appear complex, because so many possible transitions must be accounted for, and their probabilities assessed.

Six year-to-year transition probabilities are needed. Two give the probability of dying while active and inactive; these are assumed to be equal to $q_x$, the probability that an active or inactive individual will die during the year. The other four transition probabilities, for those who remain alive, are:

$$ {}^{1}p_x^{2} : \tag{7} $$

the probability that an individual in state 1 at age $x$ will survive and be in state 2 at age $x+1$, where states 1 and 2 can each stand for $a$, active, or $i$, inac-

# APPENDIX B: MARKOV WORKLIFE EXPECTANCY MODEL



tive. These are related to the transition probabilities conditional upon survival, ${}^{1}\pi_{x}^{2}$, by:

$$ {}^{1}p_{x}^{2} = (1-q_{x})\,{}^{1}\pi_{x}^{2}. $$

Transition probabilities are estimated from the linked Current Population Survey data of years $t$ and $t+1$ as follows (the "hat" in $\hat{\pi}$ indicates that it is a statistical estimate of $\pi$):

8(a) $$ {}^{1}\hat{\pi}_{x}^{i} = \frac{\text{inactives}}{\text{inactives+entrants}}; \quad {}^{1}\hat{\pi}_{x}^{a} = \frac{\text{entrants}}{\text{inactives+entrants}}; $$

8(b) $$ {}^{a}\hat{\pi}_{x}^{i} = \frac{\text{exits}}{\text{actives+exits}}; \quad {}^{a}\hat{\pi}_{x}^{a} = \frac{\text{actives}}{\text{actives+exits}}. $$

The denominators of (8a) represent all of the inactives at age $x$ *who were sampled and matched in the following year*, while the denominators of (8b) represent all of the actives at age $x$ *who were sampled and matched in the following year*. These estimated probabilities, conditional on the initial state, obviously sum to 1 for each row, and mimic the population counterparts they seek to estimate. The matching process in the CPS sample requires that each subject remain in the sample, not dying and not moving from his initial residence. In the next (un-numbered) equation, the four groups (inactives, entrants, exits, and actives) refer to the cohort who had attained age x in the first year of the linked observations and remained in the sample and was matched at age $x + 1$.

Using the relation specified in (7) between ${}^{1}p_{x}^{2}$ and ${}^{1}\pi_{x}^{2}$, the estimated transition probabilities incorporating mortality are:

$$ {}^{1}\hat{p}_{x}^{i} = (1-q_{x})\,{}^{1}\hat{\pi}_{x}^{i}; \quad {}^{1}\hat{p}_{x}^{a} = (1-q_{x})\,{}^{1}\hat{\pi}_{x}^{a}; $$
$$ {}^{a}\hat{p}_{x}^{i} = (1-q_{x})\,{}^{a}\hat{\pi}_{x}^{i}; \quad {}^{a}\hat{p}_{x}^{a} = (1-q_{x})\,{}^{a}\hat{\pi}_{x}^{a}. $$

Corresponding to the four transition probabilities there are four expectations,

(9) $$ {}^{1}e_{x}^{2}: $$

the expected number of years that an individual in state 1 at age $x$ will spend in state 2 over the remainder of life, where states 1 and 2 can each stand for $a$, active, or $i$, inactive.

The relation between these expectations and the expectation of life at age $x$ is given by:

(10) $$ {}^{1}e_{x}^{a} + {}^{1}e_{x}^{i} = e_{x}, $$

where 1 can stand for $a$ or $i$: All of the remaining life expectancy will be spent in either the active or the inactive state.

Starting at age $x$ we may let the radix ${}^{a}\ell_x$ be arbitrarily assigned (say, 100,000), while ${}^{i}\ell_x$ is set to 0. Then the following (matrix) equation will generate the number of actives and inactives at the next age.

$$\begin{pmatrix} {}^{a}\ell_{x+1} \\ {}^{i}\ell_{x+1} \end{pmatrix} = \begin{pmatrix} {}^{a}p_x^{a} & {}^{i}p_x^{a} \\ {}^{a}p_x^{i} & {}^{i}p_x^{i} \end{pmatrix} \begin{pmatrix} {}^{a}\ell_x \\ {}^{i}\ell_x \end{pmatrix} \tag{11}$$

Repeating this equation with $x$+1 substituted for $x$ will generate the actives and inactives at age $x$+2, etc. Applying (5) and (6) with this initial condition, but with the "dots" on the upper left superscripts replaced by $a$ for active, will give the first column in the expectancy matrix below. Repeating this procedure with ${}^{i}\ell_x$ as a nonzero radix and ${}^{a}\ell_x = 0$ will give the second column of the following expectancy matrix $E_x$:

$$E_x = \begin{pmatrix} {}^{a}e_x^{a} & {}^{i}e_x^{a} \\ {}^{a}e_x^{i} & {}^{i}e_x^{i} \end{pmatrix} = \begin{pmatrix} {}^{a}t_x^{a} / {}^{a}l_x & {}^{i}t_x^{a} / {}^{i}l_x \\ {}^{a}t_x^{i} / {}^{a}l_x & {}^{i}t_x^{i} / {}^{i}l_x \end{pmatrix}. \tag{12}$$

The ${}^{i}t_x^{2}$ notation in (12) refers to the sum of the ${}^{i}L_x^{2}$ to the terminal age of the life table, shown in (2) as $T_x$; the superscripts 1 and 2 denote the initial state and state being measured, respectively.

Equations (11) give the typical exposition, showing how the process evolves in the "forward" direction. However, by starting at the final age and proceeding "backwards" to earlier ages, Skoog (2002) has shown that the following recursion holds, where $P_x$ is the matrix of transition probabilities shown in (11):

$$E_x = \frac{1}{2}I + \frac{1}{2}P_x + E_{x+1}P_x. \tag{13}$$

This may be viewed as a computing algorithm that can be used to calculate the expectations given in (10), tracing through all of the alternative possible transitions.[5] Having obtained $E_{x+1}$, use equation (13) to obtain $E_x$. (14a) and (14b) give two of the four equations in (13), which together allow calculation of worklife expectancy for active and inactive persons at any age.

$$14(a) \qquad {}^{a}e_x^{a} = \underbrace{0.5 + 0.5\,{}^{a}p_x^{a}}_{\text{First year's contribution to } e_x} + \underbrace{{}^{a}p_x^{a}\,{}^{a}e_{x+1}^{a} + {}^{a}p_x^{i}\,{}^{i}e_{x+1}^{a}}_{\text{Future years' contribution to } e_x}$$

$$14(b) \qquad {}^{i}e_x^{a} = \underbrace{0.0 + 0.5\,{}^{i}p_x^{a}}_{\text{First year's contribution to } e_x} + \underbrace{{}^{i}p_x^{a}\,{}^{a}e_{x+1}^{a} + {}^{i}p_x^{i}\,{}^{i}e_{x+1}^{a}}_{\text{Future years' contribution to } e_x}$$

The first term in (14a) shows that everyone who starts the year as active generates at least 0.5 years of activity (worklife expectancy), because those

[5]For the oldest age, call it $\omega$, $E_\omega = 0$, which allows the calculation of $E_{\omega-1}$ in (13) to start the recursion.

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Life tables in this report are based on a revised methodology. Previously published tables for the years 2000-2004 have also been revised and are included in this report.

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# United States Life Tables, 2005

by Elizabeth Arias, Ph.D.; Brian L. Rostron, Ph.D.; and Betzaida Tejada-Vera, B.S., Division of Vital Statistics

## Abstract

*Objectives*—This report presents period life tables by age, race, and sex for the United States based on age-specific death rates in 2005. The tables presented are based on a newly revised methodology. For comparability, all life tables from the year 2000 forward have been re-estimated using the revised methodology and are presented in the "Technical Notes" section.

*Methods*—Data used to prepare the 2005 life tables are 2005 final mortality statistics, July 1, 2005 population estimates based on the 2000 decennial census, and 2005 Medicare data for ages 66–100. The methods used to estimate mortality for ages 0–65 were the same as those used in annual life tables from 1997 through 2004 (1). The methodology to estimate mortality for the population aged 66 and over was revised in three ways: Medicare data were used to supplement vital statistics and census data starting at age 66 rather than 85, as was done from 1997 through 2004; probabilities of death based on current Medicare data rather than rates of change of probabilities of death based on nonourrent Medicare data were used; and the smoothing and extrapolation of the probabilities of death for ages 66 and over were performed using a nonlinear least squares model rather than a linear model of the rate of change of the probabilities of death for ages 85 and over (1–3).

*Results*—In 2005, the overall expectation of life at birth was 77.4 years, representing a decline of 0.1 years from life expectancy in 2004. From 2004 to 2005, life expectancy at birth remained the same for males (74.9), females (79.9), the white population (77.9), white males (75.4), white females (80.4), the black population (72.8), and black males (69.3). Life expectancy at birth increased for black females (from 76.0 to 76.1). Life expectancy estimates based on the revised methodology are slightly lower than those based on the previous methodology. For 2005, life expectancy at birth based on the revised methodology was lower by 0.4 years for the total population.

**Keywords:** life expectancy • survival • death rates • race

## Introduction

There are two types of life tables—the cohort (or generation) and the period (or current). The cohort life table presents the mortality experience of a particular birth cohort, all persons born in the year 1900, for example, from the moment of birth through consecutive ages in successive calendar years. Based on age-specific death rates observed through consecutive calendar years, the cohort life table reflects the mortality experience of an actual cohort from birth until no lives remain in the group. To prepare just a single complete cohort life table requires data over many years. It is usually not feasible to construct cohort life tables entirely on the basis of observed data for real cohorts due to data unavailability or incompleteness (4). For example, a life table representation of the mortality experience of a cohort of persons born in 1970 would require the use of data projection techniques to estimate deaths into the future (5,6).

Unlike the cohort life table, the period life table does not represent the mortality experience of an actual birth cohort. Rather, the period life table presents what would happen to a hypothetical (or synthetic) cohort if it experienced throughout its entire life the mortality conditions of a particular time period. Thus, for example, a period life table for 2005 assumes a hypothetical cohort subject throughout its lifetime to the age-specific death rates prevailing for the actual population in 2005. The period life table may thus be characterized as rendering a "snapshot" of current mortality experience, and shows the long-range implications of a set of age-specific death rates that prevailed in a given year. In this report the term "life table" refers only to the period life table and not to the cohort life table.

## Data and Methods

The data used to prepare the U.S. life tables for 2005 are final numbers of deaths for the year 2005; postcensal population estimates for the year 2005; and, age-specific death and population counts for Medicare beneficiaries aged 66–100 for the year 2005 from the Centers for Medicare & Medicaid Services (CMS).

The populations used to estimate the life tables shown in this report were produced under a collaborative agreement with the U.S.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
National Vital Statistics System

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Census Bureau and are consistent with the postcensal estimates of the 2000 census. Reflecting the new guidelines issued in 1997 by the Office of Management and Budget (OMB), the 2000 census included an option for individuals to report more than one race as appropriate for themselves and household members (7). The 1997 OMB guidelines also provided for the reporting of Asian persons separately from Native Hawaiian or other Pacific Islander persons. Under the prior OMB standards (issued in 1977), data for Asian or Pacific Islander persons were collected as a single group (8). Beginning with deaths occurring in 2003, some states implemented multiple-race categories on the death certificate. Approximately one-half of the states continue to collect only one race for the decedent in the same categories as specified in the 1977 OMB guidelines (death certificate data do not report Asian persons separately from Native Hawaiian or other Pacific Islander persons). Death certificate data by race for these states (the numerators for death rates) are thus currently incompatible with the population data collected in the 2000 census (the denominators for the rates). To produce death rates for the years 2000–2005 it was necessary to "bridge" the reported population data for multiple-race persons back to single-race categories. In addition, the 2000 census counts were modified to be consistent with the 1977 OMB race categories, that is, to report the data for Asian persons and Native Hawaiian or other Pacific Islander persons as a combined category, Asian or Pacific Islander, and to reflect age as of the census reference date (9). The procedures used to produce the bridged populations are described in a separate publication (10). It is anticipated that bridged population data will be used over the next few years for computing population-based rates. Multiple-race data for those states that implemented the 1997 OMB guidelines are bridged back to single-race categories. Once all states are collecting data on race according to the 1997 OMB guidelines, it is expected that use of the bridged populations will be discontinued.

Readers should keep in mind that the population data used to compile death rates by race are based on special estimation procedures. They are not true counts. This is the case even for the 2000 populations that are based on the 2000 census. The estimation procedures used to develop these populations contain some errors (10). Over the next several years, additional information will be incorporated in the estimation procedures, possibly resulting in further revisions of the population estimates (see "Technical Notes").

Data from the Medicare program are used to supplement vital statistics and census data for ages 66 years and over. Death rates based on Medicare data for the oldest ages are considered to be more accurate than death rates based solely on vital and census data because beneficiaries must prove their date of birth in order to qualify for benefits while there is no such requirement in the census form question about a respondent's age. The prevalence of age misreporting at the oldest ages in census data has been found to be significant enough to lead to underestimated death rates at the oldest ages (see the "Technical Notes" section).

Life tables can be classified in two ways according to the length of the age interval in which data are presented. A complete life table contains data for every year of age. An abridged life table typically contains data by 5- or 10-year age intervals. A complete life table, of course, can be easily aggregated into 5- or 10-year age groups (see "Technical Notes" section for instructions on how to do this). Other than the decennial life tables, U.S. life tables based on data prior to 1997 are abridged life tables constructed by reference to a standard table (11). The 2005 U.S. life tables are complete life tables calculated using a newly revised method similar to that used to estimate the 1999–2001 U.S. Decennial Life Tables (3). See the "Technical Notes" section for more information on the method used to construct the life tables in this report.

*Expectation of life*—The most frequently used life table statistic is life expectancy ($e_x$), which is the average number of years of life remaining for persons who have attained a given age ($x$). Life expectancy and other life table values for each age in 2005 are shown for the total population and by race and sex in Tables 1–9. Life expectancy is summarized by age, race, and sex in Table A.

Life expectancy at birth ($e_0$) for 2005 for the total population was 77.4 years. This represents the average number of years that the members of the hypothetical life table cohort may expect to live at the time of birth (Table A).

*Survivors to specified ages*—Another way of assessing the longevity of the synthetic life table cohort is by determining the proportion who survive to specified ages. The $l_x$ column of the life table provides the data for computing the proportion. Table B summarizes the number of survivors by age, race, and sex. To illustrate, 53,338 persons out of the original 2005 synthetic life table cohort of 100,000 (or 53.3 percent) were alive at exact age 80. In other words, the probability that a person will survive from birth to age 80, given 2005 age-specific mortality, is 53 percent. Probabilities of survival can be calculated at any age by simply dividing the number of survivors at the terminal age by the number at the beginning age. For example, to calculate the probability of surviving from age 20 to age 85, one would divide the number of survivors at age 85 (36,753) by the number of survivors at age 20 (98,713), which results in a 37.2 percent probability of survival.

## Explanation of the columns of the life table

*Column 1—Age ($x$ to $x+1$)*—Shows the age interval between the two exact ages indicated. For instance, "20–21" means the 1-year interval between the 20th and 21st birthdays.

*Column 2—Probability of dying ($q_x$)*—Shows the probability of dying between ages $x$ to $x+1$. For example, for males in the age interval 20–21 years, the probability of dying is 0.001308 (Table 2). The "probability of dying" column forms the basis of the life table; all subsequent columns are derived from it.

*Column 3—Number surviving ($l_x$)*—Shows the number of persons from the original synthetic cohort of 100,000 live births, who survive to the beginning of each age interval. The $l_x$ values are computed from the $q_x$ values, which are successively applied to the remainder of the original 100,000 persons still alive at the beginning of each age interval. Thus, out of 100,000 female babies born alive, 99,384 will complete the first year of life and enter the second; 99,218 will reach age 10; 98,962 will reach age 20; and 43,649 will live to age 85 (Table 3).

*Column 4—Number dying ($d_x$)*—Shows the number dying in each successive age interval out of the original 100,000 live births. For example, out of 100,000 males born alive, 757 will die in the first year of life; 129 will die between ages 20 and 21; and 725 will die after reaching age 100 (Table 2). Each figure in column 4 is the difference between two successive figures in column 3.

*Column 5—Person-years lived ($L_x$)*—Shows the number of person-years lived by the synthetic life table cohort within an age

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interval $x$ to $x+1$. Each figure in column 5 represents the total time (in years) lived between two indicated birthdays by all those reaching the earlier birthday. Thus, the figure 98,411 for males in the age interval 20–21 is the total number of years lived between the 20th and 21st birthdays by the 98,476 (column 3) males who reached their 20th birthday out of 100,000 males born alive (Table 2).

*Column 6—Total number of person-years lived ($T_x$)*—Shows the total number of person-years that would be lived after the beginning of the age interval $x$ to $x+1$ by the synthetic life table cohort. For example, the figure 5,505,739 is the total number of years lived after attaining age 20 by the 98,476 males reaching that age (Table 2).

*Column 7—Expectation of life ($e_x$)*—Shows, at any given age, the average number of years remaining to be lived by those surviving to that age on the basis of a given set of age-specific rates of dying. It is derived by dividing the total person-years that would be lived above age $x$ by the number of persons who survived to that age interval $T_x / l_x$. Thus, the average remaining lifetime for males who reach age 20 is 55.9 years (5,505,739 divided by 98,476) (Table 2).

**Table A. Expectation of life, by age, race, and sex: United States, 2005**

| Age | All races | | | White | | | Black | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 0 | 77.4 | 74.9 | 79.9 | 77.9 | 75.4 | 80.4 | 72.8 | 69.3 | 76.1 |
| 1 | 77.0 | 74.4 | 79.4 | 77.4 | 74.9 | 79.8 | 72.9 | 69.4 | 76.0 |
| 5 | 73.1 | 70.5 | 75.5 | 73.4 | 71.0 | 75.8 | 69.0 | 65.5 | 72.2 |
| 10 | 68.1 | 65.6 | 70.6 | 68.5 | 66.0 | 70.9 | 64.0 | 60.6 | 67.2 |
| 15 | 63.2 | 60.6 | 65.6 | 63.5 | 61.1 | 65.9 | 59.1 | 55.7 | 62.3 |
| 20 | 58.4 | 55.9 | 60.7 | 58.7 | 56.3 | 61.0 | 54.4 | 51.0 | 57.4 |
| 25 | 53.6 | 51.3 | 55.9 | 54.0 | 51.7 | 56.2 | 49.7 | 46.5 | 52.6 |
| 30 | 48.9 | 46.6 | 51.0 | 49.2 | 47.0 | 51.3 | 45.1 | 42.1 | 47.8 |
| 35 | 44.2 | 42.0 | 46.2 | 44.5 | 42.3 | 46.5 | 40.5 | 37.6 | 43.1 |
| 40 | 39.5 | 37.3 | 41.4 | 39.8 | 37.7 | 41.7 | 36.0 | 33.2 | 38.5 |
| 45 | 34.9 | 32.8 | 36.8 | 35.2 | 33.2 | 37.0 | 31.7 | 28.9 | 34.0 |
| 50 | 30.5 | 28.5 | 32.2 | 30.7 | 28.8 | 32.4 | 27.5 | 24.9 | 29.8 |
| 55 | 26.2 | 24.4 | 27.8 | 26.4 | 24.8 | 27.9 | 23.7 | 21.3 | 25.7 |
| 60 | 22.1 | 20.4 | 23.5 | 22.2 | 20.8 | 23.6 | 20.1 | 17.9 | 21.8 |
| 65 | 18.2 | 16.8 | 19.5 | 18.3 | 16.9 | 19.5 | 16.8 | 14.9 | 18.2 |
| 70 | 14.6 | 13.3 | 15.6 | 14.7 | 13.4 | 15.7 | 13.8 | 12.0 | 14.8 |
| 75 | 11.3 | 10.2 | 12.1 | 11.4 | 10.3 | 12.1 | 10.8 | 9.5 | 11.7 |
| 80 | 8.5 | 7.7 | 9.1 | 8.5 | 7.8 | 9.1 | 8.5 | 7.5 | 9.1 |
| 85 | 6.2 | 5.6 | 6.6 | 6.2 | 5.5 | 6.9 | 6.5 | 5.7 | 6.9 |
| 90 | 4.5 | 4.0 | 4.7 | 4.4 | 3.9 | 4.8 | 4.9 | 4.4 | 5.1 |
| 95 | 3.1 | 2.8 | 3.2 | 3.1 | 2.7 | 3.2 | 3.6 | 3.3 | 3.7 |
| 100 | 2.2 | 2.0 | 2.2 | 2.1 | 1.9 | 2.2 | 2.7 | 2.5 | 2.7 |

**Table B. Number of survivors by age, out of 100,000 born alive, by race and sex: United States, 2005**

| Age | All races | | | White | | | Black | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| 0 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| 1 | 99,312 | 99,243 | 99,384 | 99,426 | 99,367 | 99,489 | 98,822 | 98,480 | 98,768 |
| 5 | 99,196 | 99,111 | 99,284 | 99,318 | 99,244 | 99,398 | 98,457 | 98,296 | 98,622 |
| 10 | 99,124 | 99,034 | 99,218 | 99,253 | 99,174 | 99,337 | 98,353 | 98,185 | 98,526 |
| 15 | 99,035 | 98,928 | 99,147 | 99,171 | 99,076 | 99,270 | 98,229 | 98,034 | 98,431 |
| 20 | 98,713 | 98,476 | 98,962 | 98,861 | 98,649 | 99,086 | 97,818 | 97,410 | 98,239 |
| 25 | 98,232 | 97,770 | 98,724 | 98,410 | 97,991 | 98,859 | 97,119 | 96,340 | 97,922 |
| 30 | 97,754 | 97,094 | 98,456 | 97,972 | 97,373 | 98,615 | 96,334 | 95,194 | 97,487 |
| 35 | 97,211 | 96,378 | 98,093 | 97,474 | 96,717 | 98,266 | 95,385 | 93,908 | 96,849 |
| 40 | 96,488 | 95,470 | 97,351 | 96,805 | 95,871 | 97,604 | 94,183 | 92,401 | 95,928 |
| 45 | 95,370 | 94,084 | 96,713 | 95,758 | 94,557 | 97,034 | 92,414 | 90,283 | 94,477 |
| 50 | 93,697 | 92,014 | 95,440 | 94,204 | 92,618 | 95,875 | 89,956 | 86,916 | 92,279 |
| 55 | 91,280 | 89,068 | 93,630 | 91,959 | 89,796 | 94,218 | 85,823 | 81,879 | 89,148 |
| 60 | 87,966 | 84,937 | 91,053 | 88,822 | 85,975 | 91,776 | 80,376 | 75,275 | 85,134 |
| 65 | 83,056 | 79,094 | 87,059 | 84,081 | 80,337 | 87,929 | 73,348 | 66,745 | 79,447 |
| 70 | 76,315 | 71,253 | 81,362 | 77,453 | 72,630 | 82,347 | 64,807 | 56,832 | 72,080 |
| 75 | 66,730 | 60,351 | 72,938 | 67,904 | 61,765 | 73,983 | 54,381 | 44,935 | 62,310 |
| 80 | 53,338 | 45,892 | 60,392 | 54,412 | 47,132 | 61,395 | 41,123 | 31,753 | 49,539 |
| 85 | 36,753 | 29,292 | 43,649 | 37,518 | 30,100 | 44,411 | 27,291 | 19,167 | 34,679 |
| 90 | 19,806 | 14,144 | 25,108 | 20,229 | 14,429 | 25,451 | 14,834 | 9,248 | 19,894 |
| 95 | 7,363 | 4,429 | 9,929 | 7,364 | 4,412 | 9,924 | 6,043 | 3,261 | 8,617 |
| 100 | 1,519 | 725 | 2,172 | 1,464 | 685 | 2,087 | 1,837 | 748 | 2,425 |

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## Results

### Life expectancy in the United States

Tables 1–9 show complete life tables by race (white and black) and sex for 2005. Tables A and B summarize life expectancy and survival by age, race, and sex. Life expectancy at birth for 2005 represents the average number of years that a group of infants would live if the infants were to experience throughout life the age-specific death rates prevailing in 2005. In 2005, life expectancy at birth was 77.4 years, decreasing by 0.1 years from 77.5 years in 2004. This decrease is not typical of the average annual changes that have occurred during the last 30 years, but it is not uncommon either and is mainly due to random variation from one year to the next. Throughout the past century, the trend in U.S. life expectancy was one of gradual improvement and this trend has continued into the new century (12).

Changes in mortality levels by age and cause of death have an important effect on changes in life expectancy. Life expectancy at birth for males and females did not change from 2004 to 2005, remaining at 74.9 years (males) and 79.9 years (females). Despite reductions in heart disease, cancer, stroke, and HIV disease, life expectancy did not change for males and females because of offsetting increases in mortality from unintentional injuries, chronic lower respiratory diseases, Alzheimer's disease, homicide, and influenza and pneumonia (13). Technically, life expectancy did decline for males and females from 2004 to 2005 as it did for the total population, but not enough to affect the figure to one-tenth of one year as in the case of the change observed for the total population.

The difference in life expectancy between the sexes was 5.0 years in 2005, which is the same as that in 2004. From 1900 to 1975, the difference in life expectancy between the sexes increased from 2.0 years to 7.8 years. The increasing gap during these years is attributed to increases in male mortality due to ischemic heart disease and lung cancer, both of which increased largely as the result of men's early and widespread adoption of cigarette smoking (14,15). Since 1979, the difference in life expectancy between the sexes has narrowed from 7.8 years to 5.0 years, reflecting proportionately greater increases in lung cancer mortality for women than for men and proportionately larger decreases in heart disease mortality among men (14,15).

From 2004 to 2005, life expectancy for the black population remained at 72.8 years. Similarly, for the white population life expectancy did not change from 2004 to 2005, remaining at 77.9 years. As in the case of life expectancy by sex, technically, life expectancy did change for both the white and black populations from 2004 to 2005, but not enough to affect the figure to one-tenth of one year as in the case of the change observed for the total population.

The difference in life expectancy between the white and black populations was 5.1 years in 2005, a historical low. The white-black difference in life expectancy narrowed from 14.6 years in 1900 to 5.7 years in 1982, but increased to 7.1 years in 1993 before beginning to decline again in 1994 (7.0 years). The increase in the gap from 1983 to 1993 was largely the result of increases in mortality among the black male population due to HIV infection and homicide (14,16).

Among the four race-sex groups (Figure 1), white females continued to have the highest life expectancy at birth (80.4 years), followed by black females (76.1 years), white males (75.4 years), and black males (69.3 years). From 2004 to 2005, life expectancy increased 0.1 years for black females (from 76.0 in 2004 to 76.1 in 2005). Life expectancy remained at 69.3 years for black males. Black males experienced an unprecedented decline in life expectancy every year for the period 1984–1989 (16), but annual increases in the years 1990–1992 and 1994–2004. Life expectancy in 2005 for white males (75.4 years) and white females (80.4 years) did not change from 2004. Overall, gains in life expectancy between 1980 and 2005 were 5.5 years for black males, 4.7 years for white males, 3.6 years for black females, and 2.3 years for white females (Table 12).

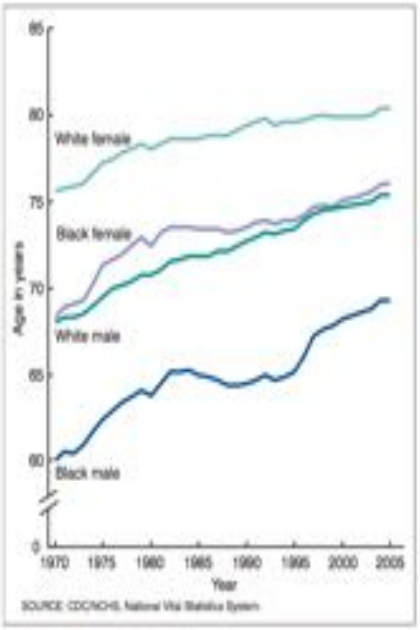


**Figure 1. Life expectancy at birth, by race and sex: United States, 1970–2005**

The 2005 life table may be used to compare life expectancy at any age from birth onward. On the basis of mortality experienced in 2005, a person aged 65 could expect to live an average of 18.2 more years for a total of 83.2 years, and a person aged 100 could expect to live an additional 2.2 years on average (Table A). Life expectancy at age 100, particularly for the black population, should be interpreted with caution as these figures may be affected somewhat by age misreporting (1,17,18).

### Survivorship in the United States

Table B summarizes the number of survivors out of 100,000 persons born alive ($l_x$) by age, race, and sex. Table 10 shows trends in survivorship from 1900 through 2005. In 2005, 99.3 percent of all infants born in the United States survived the first year of life. In contrast, only 87.6 percent of infants born in 1900 survived the first year. Fifty-three percent of the 2005 synthetic life table cohort survived to age 80 and about 1.5 percent survived to age 100. In 1900, the median age at death was 58 and only 0.03 percent survived to age 100.

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Among the four race-sex groups (Figure 2, Table B), white females have the highest median age at death with about 48.1 percent surviving to age 84. Of the original hypothetical cohort of 100,000 infant white females, 99.1 percent survive to age 20, 87.9 percent survive to age 65, and 44.4 percent survive to age 85. For white males and black females, the pattern of survival by age is similar. White males have slightly higher survival rates than black females at the younger ages with 98.6 percent surviving to age 20 and 80.3 percent surviving to age 65, compared with 98.2 percent and 79.4 percent, respectively, for black females. At the older ages, in contrast, black female survival surpasses white male survival. At age 85, white male survival is 30.1 percent compared with 34.7 percent for black females. This crossover, which occurs at about age 75, is clearly shown in Figure 2. The median age at death for black males is 73 years, which is 11 years less than that of white females. For black males, 97.4 percent survive to age 20, 66.7 percent to age 65, and 19.1 percent to age 85. By age 100, there is very little difference between the white and black populations in terms of survival. Less than 1 percent of white and black males and slightly over 2 percent of white and black females, survive to age 100.

Plotting the percentage surviving by age for the periods 1900–1902, 1949–1951, and 2005 shows an increasingly rectangular survival curve (Figure 3). That is, the survival curve has become increasingly flat in response to progressively lower mortality, particularly at the younger ages, and increasingly vertical at the older ages. The survival curve for the period 1900–1902 shows a rapid decline in survival in the first few years of life and a relatively steady decline thereafter. In contrast, the survival curve for 2005 is nearly flat until about age 50 after which the decline in survival becomes more rapid. Improvements in survival between the periods 1900–1902 and 1949–1951 occurred at all ages, although the largest improvements were among the younger population. Between 1949–1951 and 2005, improvements occurred primarily for the older population.

## Effects of revision of life table methodology on life expectancy

The revised methodology employed to estimate the 2005 life tables presented in this report resulted in lower estimates of life expectancy at birth and all other ages for all groups in comparison to life expectancy estimates based on the previous methodology used by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) (1). Table C presents a comparison of life expectancy based on both the previous and newly revised methodology for selected ages. Life expectancy at birth based on the revised methodology was lower by 0.4 years for the total population, 0.3 years for males, 0.5 years for females, 0.4 years for the white population, 0.3 years for white males, 0.4 years for white females, 0.4 years for the black population, 0.2 years for black males, and 0.4 years for black females. Similarly, life expectancy based on the revised methodology was lower in absolute terms and by similar magnitudes at ages 65, 85, and 100 and over. In relative terms, the percentage change in life expectancy between the previous and revised methods was greatest for the oldest age groups, especially ages 100 and over. For example, for the total population the percentage change in life expectancy at age 100 and over was 15 percent in comparison to 0.5 percent at birth. Similar differences were seen for all other groups (Table C). The same patterns were observed in all years for which the life tables were revised (see Appendix).

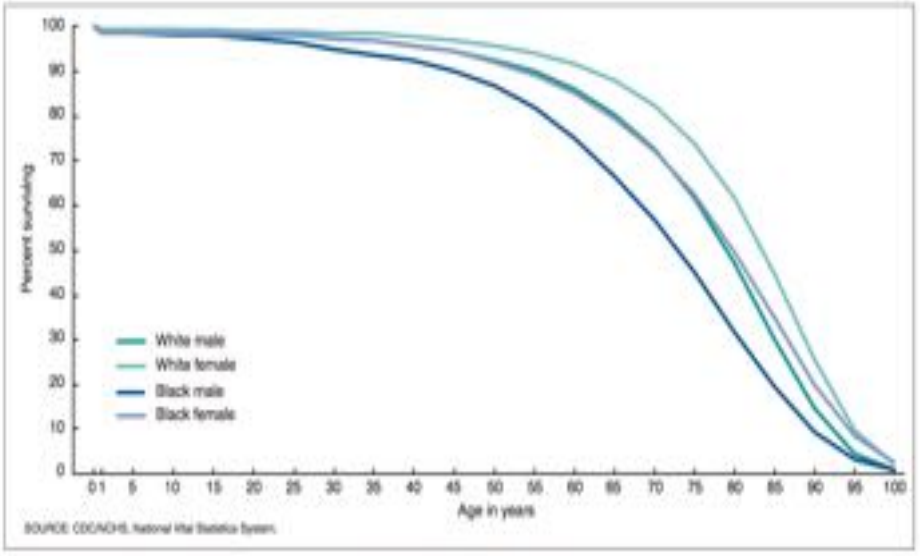


**Figure 2. Percentage surviving, by age, race, and sex: United States, 2005**

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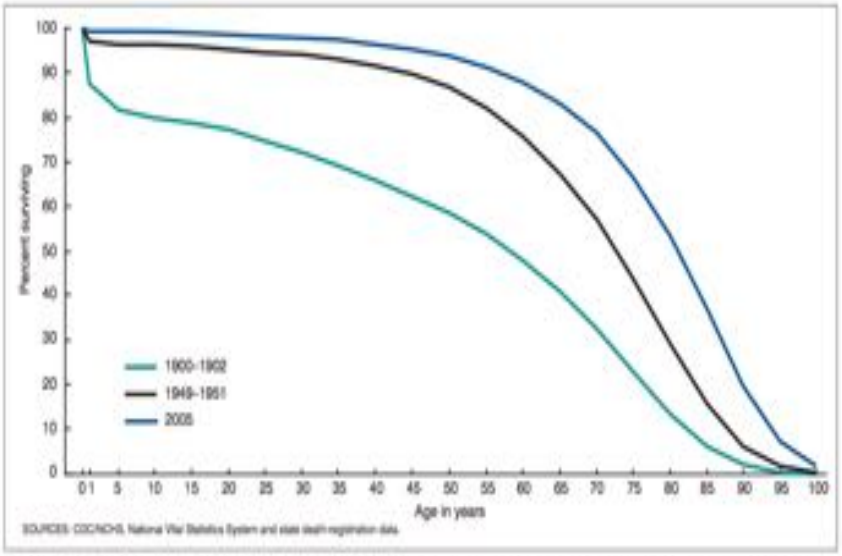


**Figure 3. Percentage surviving by age: Death-registration states, 1900–1902, and United States, 1949–1951 and 2005**

**Table C. Comparison of life expectancy at selected ages between previous and revised life table methodology: United States, 2005**

| Age, race, sex | Total | | | Males | | | Females | | |
|---|---|---|---|---|---|---|---|---|---|
| | PM | RM | PM-RM | PM | RM | PM-RM | PM | RM | PM-RM |
| All races | | | | | | | | | |
| 0 | 77.8 | 77.4 | 0.4 | 75.2 | 74.9 | 0.3 | 80.4 | 79.9 | 0.5 |
| 65 | 18.7 | 18.2 | 0.5 | 17.2 | 16.8 | 0.4 | 20.0 | 19.5 | 0.5 |
| 85 | 6.8 | 6.2 | 0.6 | 6.1 | 5.6 | 0.5 | 7.2 | 6.6 | 0.6 |
| 100 | 2.6 | 2.2 | 0.4 | 2.3 | 2.0 | 0.3 | 2.6 | 2.2 | 0.4 |
| White | | | | | | | | | |
| 0 | 78.3 | 77.9 | 0.4 | 75.7 | 75.4 | 0.3 | 80.8 | 80.4 | 0.4 |
| 65 | 18.8 | 18.3 | 0.5 | 17.2 | 16.9 | 0.3 | 20.0 | 19.5 | 0.5 |
| 85 | 6.7 | 6.2 | 0.5 | 6.0 | 5.5 | 0.5 | 7.1 | 6.6 | 0.5 |
| 100 | 2.5 | 2.1 | 0.4 | 2.3 | 1.9 | 0.4 | 2.5 | 2.2 | 0.3 |
| Black | | | | | | | | | |
| 0 | 73.2 | 72.8 | 0.4 | 69.5 | 69.3 | 0.2 | 76.5 | 76.1 | 0.4 |
| 65 | 17.2 | 16.8 | 0.4 | 15.2 | 14.9 | 0.3 | 18.7 | 18.2 | 0.5 |
| 85 | 7.1 | 6.5 | 0.6 | 6.2 | 5.7 | 0.5 | 7.5 | 6.9 | 0.6 |
| 100 | 3.2 | 2.7 | 0.5 | 2.9 | 2.5 | 0.4 | 3.2 | 2.7 | 0.5 |

NOTE: PM is previous life table methodology; RM is revised life table methodology.

## References


1. Anderson RN. A method for constructing complete annual U.S. life tables. National Center for Health Statistics. Vital Health Stat 2(129). 1999.
2. Heligman L, Pollard JH. The age pattern of mortality. J Inst Actuar 107(1):49–80. 1980.
3. Wei R, Curtin LR, Arias E, Anderson RN. U.S. decennial life tables for 1999–2001, methodology of the United States life tables. National vital statistics reports; vol 57, no 4. Hyattsville, MD: National Center for Health Statistics. 2008.
4. Shryock HS, Siegel JS, et al. The methods and materials of demography, vol 2. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office. 1971.
5. Moriyama IM, Gustavus SO. Cohort mortality and survivorship, United States death-registration states, 1900–68. National Center for Health Statistics. Vital Health Stat 3(16). 1972.
6. Preston SM, Heuveline P, Guillot M. Demography, Measuring and Modeling Population Processes. Oxford: Blackwell Publishers. 2001.

# Economic News Release



## Table 3. Time spent in primary activities for the civilian population by age, sex, race, Hispanic or Latino ethnicity, marital status, and educational attainment, 2014 annual averages

**Table 3. Time spent in primary activities for the civilian population by age, sex, race, Hispanic or Latino ethnicity, marital status, and educational attainment, 2014 annual averages**

| Characteristic | Average hours per day spent in primary activities(1) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Personal care activities | Eating and drinking | Household activities | Purchasing goods and services | Caring for and helping household members | Caring for and helping non-household members | Working and work-related activities | Educational activities | Organizational, civic, and religious activities | Leisure and sports | Telephone calls, mail, and e-mail | Other activities, not elsewhere classified |
| **Age and sex** | | | | | | | | | | | | |
| **Total, 15 years and over** | 9.58 | 1.17 | 1.77 | 0.74 | 0.54 | 0.18 | 3.59 | 0.42 | 0.32 | 5.30 | 0.14 | 0.23 |
| **15 to 19 years** | 10.57 | 1.08 | 0.66 | 0.58 | 0.25 | 0.18 | 1.25 | 2.90 | 0.28 | 5.74 | 0.20 | 0.31 |
| **20 to 24 years** | 10.15 | 1.03 | 1.01 | 0.66 | 0.40 | 0.14 | 3.71 | 0.95 | 0.19 | 5.45 | 0.13 | 0.18 |
| **25 to 34 years** | 9.50 | 1.09 | 1.59 | 0.63 | 1.10 | 0.12 | 4.75 | 0.38 | 0.21 | 4.34 | 0.09 | 0.20 |
| **35 to 44 years** | 9.15 | 1.11 | 1.88 | 0.69 | 1.17 | 0.16 | 4.99 | 0.13 | 0.31 | 4.10 | 0.11 | 0.19 |
| **45 to 54 years** | 9.35 | 1.18 | 1.95 | 0.78 | 0.40 | 0.21 | 4.67 | 0.05 | 0.31 | 4.75 | 0.13 | 0.22 |
| **55 to 64 years** | 9.28 | 1.21 | 2.01 | 0.82 | 0.16 | 0.24 | 4.02 | 0.04 | 0.40 | 5.45 | 0.15 | 0.21 |
| **65 to 74 years** | 9.65 | 1.37 | 2.44 | 0.90 | 0.11 | 0.25 | 1.32 | (2) - | 0.49 | 6.94 | 0.19 | 0.32 |
| **75 years and over** | 9.97 | 1.41 | 2.19 | 0.81 | 0.13 | 0.15 | 0.33 | (2) - | 0.47 | 8.02 | 0.25 | 0.28 |
| **Men, 15 years and over** | 9.32 | 1.21 | 1.38 | 0.60 | 0.35 | 0.15 | 4.29 | 0.40 | 0.27 | 5.71 | 0.10 | 0.22 |
| **15 to 19 years** | 10.35 | 1.04 | 0.53 | 0.30 | 0.21 | 0.12 | 1.17 | 3.13 | 0.25 | 6.43 | 0.14 | 0.32 |
| **20 to 24 years** | 9.94 | 1.02 | 0.63 | 0.50 | 0.12 | 0.15 | 4.15 | 0.59 | 0.18 | 6.40 | 0.11 | 0.21 |
| **25 to 34 years** | 9.21 | 1.13 | 1.23 | 0.51 | 0.59 | 0.12 | 5.73 | 0.30 | 0.18 | 4.72 | 0.08 | 0.20 |
| **35 to 44 years** | 8.81 | 1.10 | 1.42 | 0.56 | 0.83 | 0.16 | 6.12 | 0.11 | 0.27 | 4.38 | 0.09 | 0.17 |
| **45 to 54 years** | 9.09 | 1.25 | 1.53 | 0.67 | 0.31 | 0.18 | 5.34 | (3) - | 0.24 | 5.10 | 0.07 | 0.19 |
| **55 to 64 years** | 9.05 | 1.23 | 1.60 | 0.74 | 0.11 | 0.14 | 4.73 | (2) - | 0.37 | 5.77 | 0.09 | 0.17 |
| **65 to 74 years** | 9.41 | 1.50 | 2.07 | 0.74 | 0.09 | 0.21 | 1.73 | (2) - | 0.39 | 7.30 | 0.14 | 0.41 |
| **75 years and over** | 9.77 | 1.60 | 1.84 | 0.68 | 0.12 | 0.15 | 0.43 | (2) - | 0.38 | 8.65 | 0.13 | 0.23 |
| **Women, 15 years and over** | 9.82 | 1.14 | 2.14 | 0.87 | 0.72 | 0.21 | 2.94 | 0.44 | 0.37 | 4.93 | 0.19 | 0.24 |
| **15 to 19 years** | 10.79 | 1.12 | 0.79 | 0.86 | 0.28 | 0.23 | 1.33 | 2.66 | 0.31 | 5.03 | 0.27 | (3) - |
| **20 to 24 years** | 10.37 | 1.05 | 1.39 | 0.82 | 0.69 | 0.13 | 3.26 | 1.32 | 0.20 | 4.48 | 0.14 | 0.15 |
| **25 to 34 years** | 9.78 | 1.04 | 1.95 | 0.75 | 1.60 | 0.11 | 3.79 | 0.46 | 0.24 | 3.96 | 0.11 | 0.20 |
| **35 to 44 years** | 9.47 | 1.12 | 2.33 | 0.82 | 1.51 | 0.16 | 3.91 | 0.15 | 0.36 | 3.83 | 0.13 | 0.22 |
| **45 to 54 years** | 9.61 | 1.11 | 2.36 | 0.89 | 0.49 | 0.23 | 4.02 | 0.08 | 0.37 | 4.40 | 0.18 | 0.25 |
| **55 to 64 years** | 9.48 | 1.18 | 2.40 | 0.90 | 0.21 | 0.34 | 3.37 | 0.06 | 0.43 | 5.17 | 0.22 | 0.25 |
| **65 to 74 years** | 9.87 | 1.26 | 2.76 | 1.04 | 0.12 | 0.29 | 0.96 | (2) - | 0.58 | 6.62 | 0.25 | 0.23 |
| **75 years** | | | | | | | | | | | | |

# APPENDIX D: TIME SPENT IN PRIMARY ACTIVITIES

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| and over | 10.11 | 1.27 | 2.43 | 0.89 | 0.14 | 0.15 | 0.26 | [3] - | 0.53 | 7.58 | 0.33 | 0.31 |
| **Race and Hispanic or Latino ethnicity** | | | | | | | | | | | | |
| White, 15 years and over | 9.50 | 1.21 | 1.89 | 0.75 | 0.54 | 0.19 | 3.64 | 0.34 | 0.31 | 5.27 | 0.13 | 0.24 |
| Men | 9.27 | 1.24 | 1.47 | 0.61 | 0.36 | 0.16 | 4.40 | 0.31 | 0.25 | 5.62 | 0.09 | 0.23 |
| Women | 9.71 | 1.17 | 2.28 | 0.89 | 0.72 | 0.22 | 2.93 | 0.37 | 0.37 | 4.93 | 0.17 | 0.24 |
| Black or African American, 15 years and over | 10.05 | 0.88 | 1.18 | 0.67 | 0.50 | 0.17 | 3.17 | 0.61 | 0.43 | 5.90 | 0.24 | 0.20 |
| Men | 9.57 | 0.90 | 0.92 | 0.55 | 0.30 | 0.16 | 3.47 | 0.73 | 0.41 | 6.64 | 0.16 | 0.19 |
| Women | 10.44 | 0.87 | 1.40 | 0.76 | 0.66 | 0.17 | 2.93 | 0.52 | 0.44 | 5.29 | 0.31 | 0.21 |
| Asian, 15 years and over | 9.83 | 1.43 | 1.55 | 0.71 | 0.55 | 0.12 | 3.84 | 0.93 | 0.28 | 4.38 | 0.17 | 0.21 |
| Men | 9.59 | 1.50 | 1.08 | 0.55 | 0.40 | 0.14 | 4.73 | [3] - | [3] - | 4.80 | 0.09 | 0.26 |
| Women | 10.03 | 1.36 | 1.92 | 0.84 | 0.66 | 0.11 | 3.14 | 1.21 | 0.27 | 4.04 | 0.24 | 0.17 |
| Hispanic or Latino ethnicity, 15 years and over | 9.90 | 1.20 | 1.75 | 0.75 | 0.75 | 0.15 | 3.53 | 0.70 | 0.27 | 4.63 | 0.08 | 0.27 |
| Men | 9.75 | 1.19 | 1.11 | 0.58 | 0.51 | 0.12 | 4.33 | 0.68 | 0.26 | 5.13 | 0.06 | 0.28 |
| Women | 10.05 | 1.21 | 2.40 | 0.92 | 0.99 | 0.18 | 2.73 | 0.73 | 0.28 | 4.13 | 0.11 | 0.25 |
| **Marital status and sex** | | | | | | | | | | | | |
| Married, spouse present | 9.25 | 1.27 | 2.14 | 0.78 | 0.74 | 0.17 | 3.96 | 0.08 | 0.36 | 4.91 | 0.11 | 0.22 |
| Men | 9.04 | 1.31 | 1.63 | 0.64 | 0.51 | 0.13 | 4.91 | 0.05 | 0.31 | 5.20 | 0.07 | 0.21 |
| Women | 9.48 | 1.22 | 2.65 | 0.93 | 0.99 | 0.23 | 2.99 | 0.11 | 0.41 | 4.61 | 0.15 | 0.23 |
| Other marital statuses | 9.93 | 1.07 | 1.37 | 0.68 | 0.32 | 0.19 | 3.20 | 0.79 | 0.29 | 5.73 | 0.18 | 0.24 |
| Men | 9.66 | 1.09 | 1.07 | 0.55 | 0.16 | 0.19 | 3.57 | 0.81 | 0.23 | 6.30 | 0.13 | 0.23 |
| Women | 10.16 | 1.06 | 1.63 | 0.80 | 0.45 | 0.19 | 2.89 | 0.77 | 0.34 | 5.24 | 0.22 | 0.24 |
| **Educational attainment, 25 years and over** | | | | | | | | | | | | |
| Less than a high school diploma | 10.08 | 1.08 | 2.15 | 0.62 | 0.59 | 0.14 | 2.48 | [3] - | 0.29 | 6.25 | 0.07 | 0.17 |
| High school diploma, no college | 9.52 | 1.13 | 2.07 | 0.73 | 0.47 | 0.22 | 3.43 | 0.03 | 0.30 | 5.73 | 0.13 | 0.24 |
| Some college or associate degree | 9.39 | 1.16 | 2.00 | 0.76 | 0.57 | 0.19 | 3.90 | 0.16 | 0.36 | 5.16 | 0.14 | 0.21 |
| Bachelor's degree and higher | 9.15 | 1.32 | 1.77 | 0.83 | 0.69 | 0.17 | 4.51 | 0.19 | 0.39 | 4.56 | 0.17 | 0.24 |

**Footnotes**

[1] All major activity categories include related travel time. See Technical Note for activity category definitions.

[2] Estimate is approximately zero.

[3] Estimate is suppressed because it does not meet the American Time Use Survey publication standards.

NOTE: A primary activity refers to an individual's main activity. Other activities done simultaneously are not included. Unless otherwise specified, data refer to persons 15 years and over. Persons of Hispanic or Latino ethnicity may be of any race.

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**Last Modified Date:** June 24, 2015

DEPARTMENT OF JUSTICE

Office of the Attorney General

28 CFR Part 104

[CIV 104P; AG Order No. 2541-2001]

RIN 1105-AA79

## September 11th Victim Compensation Fund of 2001

ACTION: Interim final rule with request for comments.

SUMMARY: Shortly after the September 11, 2001 terrorist attacks, the President signed the "September 11 Victim Compensation Fund of 2001" (the "Fund") into law as Title IV of Public Law 107-42 ("Air Transportation Safety and System Stabilization Act") (the "Act"). The Act authorizes compensation to any individual (or the personal representative of a deceased individual) who was physically injured or killed as a result of the terrorist-related aircraft crashes on that day. The Act provides that the Fund will be administered by a Special Master appointed by the Attorney General. On November 26, 2001, the Attorney General appointed Kenneth R. Feinberg as Special Master.

The Department of Justice, in consultation with the Special Master, is issuing certain procedural rules so the Special Master may commence operations of the program as soon as practicable. In order to allow the Special Master to begin distributing funds, the Department is issuing this rule as an "Interim Final Rule" that will have the force and effect of law immediately upon publication. This rule is designated "interim," however, because the Department is also seeking further comment for a period of 30 days as part of its further review and may expand or adjust aspects of the rule after receiving additional comments.

DATES: This interim rule takes effect on December 21, 2001. Comments in response to this notice are due by January 22, 2002.

ADDRESSES: Comments on the interim rule should be submitted by e-mail to: victimcompensation.comments@usdoj.gov, or by telefax to 301-519-5936. Telefaxes should be limited to 15 pages. Comments may also be mailed to Kenneth L. Zwick, Director, Office of Management Programs, Civil Division, U.S. Department of Justice, Main Building, Room 3140, 950 Pennsylvania Avenue NW, Washington, DC 20530. However, the Department encourages commenters to submit their comments by e-mail or telefax. Comments received are public records. The name and address of the commenter should be included with all submissions. The comments will be made available on the Victim Compensation Fund Web site, www.usdoj.gov/victimcompensation. Comments will also be available for public inspection at a reading room in Washington, DC. Arrangements to visit the reading room must be made in advance by calling 888-714-3385 (TDD: 888-560-0844).

FOR FURTHER INFORMATION CONTACT: Kenneth L. Zwick, Director, Office of Management Programs, Civil Division, U.S. Department of Justice, Main Building, Room 3140, 950 Pennsylvania Avenue NW, Washington, DC 20530, telephone 888-714-3385 (TDD 888-560-0844).

SUPPLEMENTARY INFORMATION:

### Statement by the Special Master

The September 11th Victim Compensation Fund of 2001 is an unprecedented expression of compassion on the part of the American people to the victims and their families devastated by the horror and tragedy of September 11. The Act itself (specifically Title IV—Victim Compensation), and the attached regulations drafted and implemented pursuant to the Act, are designed to bring some measure of financial relief to those most devastated by the events of September 11. In one important sense, the Fund symbolizes the commitment of the American people to those most in need. It is an example of how Americans rally around the less fortunate.

The attached regulations have two objectives: (1) To provide fair, predictable and consistent compensation to the victims of September 11 and their families throughout the life of the program; and (2) to do so in an expedited, efficient manner without unnecessary bureaucracy and needless demands on the victims. The regulations highlight a fast track administrative compensation program, eliminating the red tape, time and expense of a traditional lawsuit. Quick payment to eligible claimants characterizes this program.

The Fund offers the eligible claimant an alternative to litigation. To succeed in the courtroom, a victim of the September 11 tragedy, or his or her representative, would be compelled to litigate, probably for many years at excessive cost, and with all the uncertainty of result which is part of the litigation process. Among the hazards of such a court proceeding are: Would liability be demonstrated? Against whom? Would sufficient funds be available to pay in full any resulting tort award? Would the verdict, even if favorable, withstand appellate challenge?

Trade-offs are required in developing Fund procedures that are different than those in the more conventional lawsuit. It is possible to develop an alternative administrative scheme, providing speedy and efficient compensation, which will help bring some closure to the events of September 11. We should not require its victims to revisit the tragic events of September 11 over and over again during the pendency of a lawsuit in our courts.

In formulating the regulations, we heeded the instruction of the Attorney General to help the neediest of victims as quickly as possible. Accordingly, under these regulations, an eligible claimant can receive an *immediate* advance payment of $50,000 in cases involving death, or $25,000 in certain cases involving serious physical injury. These payments are downpayments only, advanced to provide immediate financial assistance to those in need.

We were required, of course, to adhere to the language which Congress set out in the statute, including the provisions requiring that awards be offset by all collateral source compensation such as benefits from life insurance and other government programs. However, we did find ambiguity in the statute as to gifts provided to victims and their families by private charities. These regulations do not require that awards be offset by such private charitable assistance.

We have concluded that the purpose of the Act is not simply to examine economic and noneconomic harm, but also to provide compensation that is just and appropriate in light of claimants' individual circumstances. We have concluded that any methodology that does nothing more than attempt to replicate a theoretically possible future income stream would lead to awards that would be insufficient relative to the needs of some victims' families, and excessive relative to the needs of others. The statute specifies that individual circumstances beyond economic and noneconomic harm should be taken into account. It is our view that, absent extraordinary circumstances, awards in excess of $3 million, tax-free, will rarely be appropriate in light of individual needs and resources. At the same time, we want to ensure that victims' families are receiving at least a minimum level of resources to help meet their needs and rebuild their lives. Thus, we have concluded that the families of deceased victims should receive a combined total

of at least $500,000 from this program, other state and Federal programs, life insurance policies and other sources of compensation. Similarly, the baseline for single decedents should be $300,000. This ensures that every needy claimant's total compensation from this program and other sources will be at least equal to these threshold amounts.

In sum, the September 11th Victim Compensation Fund of 2001 is an attempt by the American people to demonstrate their solidarity with, and generosity for, those injured by the terrible September 11 attack on our country. It provides an alternative compensation scheme to the traditional tort system, a method of providing substantial and quick compensation to those who elect to participate.

Neither this Fund nor any monetary compensation can possibly provide a full measure of relief to those who have suffered as a result of September 11. But the Fund will provide appropriate compensation and some measure of comfort to those whose lives have been torn asunder by the events of September 11.

*Background*

The following discussion provides background information and explanation of the regulations promulgated herein. Section A describes the statutory backdrop for the regulations; Section B discusses the Department's rulemaking procedures to date; Section C addresses Eligibility; Section D pertains to Advance Benefits; Section E discusses Final Awards made by the Fund; Section F describes the Special Master's claims evaluation process; and Section G relates to Assistance to Claimants. The text of the regulations is set forth following these explanatory sections. A catalog of public commentary is set forth thereafter as an Appendix. More detailed information regarding the program, including a flow chart of applicable procedures and a table of estimated or "presumed" awards, will be available on the Victims Compensation Fund Web site at www.usdoj.gov/victimcompensation.

A. The Statute

The President signed the "September 11th Victim Compensation Fund of 2001" (the "Fund") into law on September 22, 2001, as Title IV of Public Law 107–42 ("Air Transportation Safety and System Stabilization Act") ("the Act"). The purpose of this Fund is to provide compensation to eligible individuals who were physically injured as a result of the terrorist-related aircraft crashes of September 11, 2001, and compensation through a "personal representative" for those who died as a result of the crashes. Generally, eligibility is limited to: (1) Individuals on the planes at the time of the crashes (other than the terrorists); and (2) individuals present at the World Trade Center, the Pentagon or the site of the crash in Pennsylvania at the time of the crashes or in the immediate aftermath of the crashes.

The Fund is designed to provide a no-fault alternative to tort litigation for individuals who were physically injured or killed as a result of the aircraft hijackings and crashes on September 11, 2001. Others who may have suffered losses as a result of those events (e.g., those without identifiable physical injuries but who lost employment) are not included in this special program. Indeed, compensation will be provided only for losses caused on account of personal physical injuries or death, even though the victims may have suffered other losses, such as property loss. For this reason, the Department and the Special Master anticipate that all awards from the Fund will be free of federal taxation. *See* I.R.C. § 104(a)(2) (stating that damages received "on account of personal physical injuries or physical sickness" are excludable from gross income for purposes of federal income taxation).

A claimant who files for compensation waives any right to file a civil action (or to be a party to an action) in any federal or state court for damages sustained as a result of the terrorist-related aircraft crashes of September 11, 2001, except for actions to recover collateral source obligations.

Determinations on eligibility and the amount of compensation are to be made by the Special Master. After determining whether an individual is an eligible claimant under the Act, the Special Master is to determine the amount of compensation to be awarded based upon the harm to the claimant, the facts of the claim, and the individual circumstances of the claimant.

The law also provides that the Special Master is to make a final determination on any claim within 120 days from when the claim was filed and, if an award is made, to authorize payment within 20 days thereafter. The determinations of the Special Master are final and are not reviewable by any court. Claims with the Fund must be filed on or before two years after the effective date of these regulations, i.e. December 22, 2003. Payments from the Fund are made by the United States Government, which in turn obtains the right of subrogation to each award.

Pursuant to the Act, regulations addressing certain administrative matters must be issued within 90 days of enactment. Section 407 of the Act provides that the Department, in consultation with the Special Master, promulgate regulations on four matters by December 21, 2001:

(1) Forms to be used in submitting claims;

(2) The information to be included in such forms;

(3) Procedures for hearing and the presentation of evidence; and

(4) Procedures to assist an individual in filing and pursuing claims under this title.

In addition, section 407 authorizes, but does not require, the Department to issue additional rules to implement the program. This Interim Final Rule addresses issues beyond the four specifically required by the Act in order to create a program that will be efficient, will treat similarly situated claimants alike, and will allow potential claimants to make informed decisions regarding whether to file claims with the Fund. Nonetheless, the Department recognizes that it cannot anticipate all of the issues that will arise over the course of the program and that there will inevitably be many difficult issues that the Special Master will have to resolve in the course of making determinations on individual claims.

B. Rulemaking History to Date

On November 5, 2001, the Department requested public input on a number of issues. 66 FR 55901. The Department noted that, at that time, the Special Master had not yet been appointed, but that it wanted as much public comment as feasible before issuing the regulations by December 21, 2001. On November 26, 2001, the Attorney General appointed Kenneth R. Feinberg as Special Master. As called for by the Act, this interim final rule is promulgated in consultation with the Special Master.

The Department received more than 800 comments in response to the Department's Notice of Inquiry. Some were very brief and only spoke to a single issue; others responded to the Department's questions on a point by point basis. Still others contained detailed analyses, recommendations and even proposed regulatory language.

The range of commenters was very broad. Some commenters identified themselves as citizens, taxpayers or law professors, and many identified themselves as individuals who had contributed to charities for those impacted by the terrorist crashes. Many other commenters identified themselves as members of victims' families, partners or close friends, including some from organizations and groups of

survivors. Several commenters identified themselves as employers who lost a significant number of employees in the crashes. A number of commenters identified themselves as residents of housing near "Ground Zero" in New York.

In addition, the Department received comments from many organizations including the American Insurance Association, the American Arbitration Association, the American Bar Association, Trial Lawyers Care, New York Trial Lawyers' Association, New York City Bar Association, Massachusetts Bar Association, National Center for Victims of Crime, National Association of Crime Victim Compensation Boards, the Oklahoma Crime Victim Compensation Board, Consumers Union, Public Citizen, the National Right To Life Committee, the Lamda Legal Defense & Education Fund, the American Civil Liberties Union, the Association of Flight Attendants, the Council on Foundations, the Nonprofit Coordinating Committee of New York, Independent Sector, the Alternative Dispute Resolution of the Federal Bar Association, the Alliance of Fiduciary Consultants, and the Foreign Claims Settlement Commission.

Individual members of Congress, groups of members, and members of the Senate leadership also provided comments. Further, joint comments were submitted on behalf of the New York City Mayor, the New York Governor, and the New York Attorney General, by members of the New York Assembly, and by the Attorney General of Connecticut.

Comments were also submitted by United Airlines and American Airlines, and from various individuals and companies who identified themselves as having expertise or experience in the administration of claims programs.

The Department has read every submission it received in response to this notice, from handwritten notes to scholarly discussions. The Department wants to express its appreciation for the time and careful thought reflected in those submissions.

While the Department has reviewed every submission it received, it will not regulate on every topic addressed in those comments. Over 70 separate topics were identified; almost two dozen full size notebooks are necessary to organize all of the comments by topic. All of the comments will be retained by the Department for subsequent consideration when it reviews comments on this interim final rule, and the comments will remain posted on the Department's web site where they may be reviewed by the public. The Department was pleased to see that some comments responded to others placed on the web site, and hopes this facility will continue to be of interest to the public.

It is not feasible to repeat here all of the suggestions received in the comments, let alone directly respond to each. The Appendix to this interim final rulemaking highlights some of the points raised by commenters in order to indicate the range of views received on how various issues should be approached.

C. Eligibility

Section 405(b) of the Act requires the Special Master to determine whether a claimant is an "eligible individual" under section 405(c). "Eligibility," in turn, is defined by the Act to include: (1) individuals (other than the terrorists) aboard American Airlines flights 11 and 77 and United Airlines flights 93 and 175; (2) individuals who were "present at" the World Trade Center, the Pentagon, or the site of the aircraft crash at Shanksville, Pennsylvania at the time or in the immediate aftermath of the crashes; or (3) personal representatives of deceased individuals who would otherwise be eligible. Moreover, to be eligible for an award, an individual must have suffered physical harm or death as a result of one of the terrorist-related air crashes. This interim final rule addresses eligibility by defining the terms "present at the site," "immediate aftermath," "physical harm," and "personal representative."

*"Present at the site"*: This rule defines the term "present at the site" (i.e. the World Trade Center, Pentagon, or Shanksville site) to mean physically present at the time of the crashes or immediate aftermath:

(1) In the buildings or portions of buildings that were destroyed as a result of the airplane crashes; or

(2) In any area contiguous to the crash sites that the Special Master determines was sufficiently close to the site that there was a demonstrable risk of physical harm resulting from the impact of the aircraft or any subsequent fire, explosions, or collapse of buildings (generally, the immediate area in which the impact occurred, fire occurred, portions of buildings fell, or debris fell upon and injured persons).

There are several reasons for this geographic limitation. First, this geographic limitation comports with the plain meaning of the statutory term "present at." Second, this geographic limitation is consistent with the further statutory requirement of physical injury or death, because the zone designated is that in which there was a demonstrable risk of physical harm from falling debris, explosions, or fire.

*"Immediate aftermath"*: This rule defines the term "immediate aftermath" of the crashes to mean, for purposes of all claimants other than rescue workers, the period of time from the crashes until 12 hours after the crashes. This time frame appears to cover all of those who suffered physical injury or death, with the exception of rescue workers.

With respect to rescue workers who assisted in efforts to search for and recover victims, the regulations define "the immediate aftermath" to include the period from the crashes until 96 hours after the crashes. The regulations provide for this longer time period for rescue workers in recognition of their heroic efforts and their selfless reasons for being at the sites, and responds to a request by the Mayor of New York City that the program recognize the high level of danger and difficulty during the first four days of rescue operations.

*"Physical harm"*: This rule defines the term "physical harm" to mean an objectively verifiable physical injury that was treated by a medical professional within 24 hours of the injury having been sustained or within 24 hours of rescue and either required hospitalization as an in-patient for at least 24 hours or caused, either temporarily or permanently, partial or total physical disability, incapacity, or disfigurement.

There are several reasons for this definition. The statutory term "physical harm" indicates that Congress did not intend for this Fund to compensate those who suffered only emotional harm or property damage. The statutory term "physical harm" also indicates that Congress did not intend for this Fund to cover those who face only a risk of future injury (i.e. latent harm that does not fully manifest itself within the statutory time period for this Fund). Indeed, because participation in this Fund precludes claimants from recovering through tort litigation, those with latent injuries that later became manifest would likely be undercompensated if they sought compensation now from the Fund before the injuries became manifest. Conversely, those who recovered for latent injuries that did not later become manifest could be overcompensated if they recovered from the Fund. While Congress might later consider whether an administrative program for latent harm caused by the September 11, 2001 terrorist-related aircraft crashes may be appropriate, the language of the statute that created this Fund does not contemplate awards for that purpose.

*"Personal Representative":* Section 405(c)(2)(C) provides that in the case of an individual who is deceased but who otherwise meets the other criteria for eligibility, a claim can be filed by the Personal Representative of the decedent. Section 405(c)(3)(A) provides that no more than one claim may be submitted by an individual or on behalf of a deceased individual.

In many or most cases, the identity of the "Personal Representative" will not be in dispute. Where there are disputes, two issues arise: (1) What are the rules for determining who is the Personal Representative?; and (2) who should apply the rules and resolve the dispute?

As to the first issue, the regulations rely on state law. Subject to certain contingencies, this rule defines the term "Personal Representative" to mean an individual appointed by a court of competent jurisdiction as the Personal Representative of the decedent or as the executor or administrator of the decedent's will or estate. In the event that no Personal Representative or executor or administrator has been appointed by any court of competent jurisdiction, and such issue is not the subject of pending litigation or other dispute, the Special Master may, in his discretion, determine that the Personal Representative is the person named by the decedent in the decedent's will as the executor or administrator. In the event no will exists, the Special Master may, in his discretion, determine that the Personal Representative is the first person in the line of succession established by the laws of the state of the decedent's domicile governing intestacy.

Reliance on state law is necessary in part because those who file for recovery under the Fund waive their rights to recover through litigation, in which state law would determine the identity of the appropriate representatives of the decedent, or the decedent's estate, to bring suit. Thus, if the identity of Personal Representatives for purposes of this Fund were determined by federal regulation, there could be many situations in which the representative as defined by state law would choose litigation while the Personal Representative as defined by federal regulation would seek to recover from the Fund.

The second issue raises questions of program administration. Disputes between relatives, former spouses and other interested parties can be exceptionally fact-intensive and time-consuming. Indeed, state courts often spend considerable time and resources resolving such matters. The Special Master cannot accomplish his statutory duties if bogged down with these types of complex disputes. Nor would it be advisable for the Special Master to attempt to step in and supplant state court practice or the testamentary intent of decedents. Consequently, the rule provides that the Special Master has no obligation to arbitrate, litigate or otherwise resolve disputes as to the identity of the Personal Representative. Instead, to ensure that funds are not needlessly tied up due to disputes regarding the identity of the Personal Representative, the regulations provide that the disputing parties may agree *in writing* to the identity of a Personal Representative to act on their behalf, who may seek and accept payment from the Fund while those disputing parties work to settle their dispute. In appropriate cases, the Special Master may determine an award, but place the payment in escrow until the dispute regarding the Personal Representative is finally resolved.

Finally, the determination of the Personal Representative is not the same question as the determination of who ultimately will receive the award. In that regard, this rule provides that the Personal Representative shall distribute the award in a manner consistent with the law of the decedent's domicile or any applicable rulings made by a court of competent jurisdiction. However, in order to assure that the families of needy victims receive adequate compensation, the regulations further provide that the Personal Representative shall, before payment is authorized, provide to the Special Master a plan for distribution of any award received from the Fund. Notwithstanding any other provision of these regulations or any other provision of state law, in the event that the Special Master concludes that the Personal Representative's plan for distribution does not appropriately compensate the victim's spouse, children, or other relatives, the Special Master may direct the personal representative to distribute all or part of the award be distributed to such spouse, children, or other relatives.

D. Advance Benefits

In order to comply with the Attorney General's November 26, 2001 instructions to the Special Master to pay benefits to eligible claimants as quickly as possible, these regulations permit claimants to seek immediate "Advance Benefits" in the fixed amount of $50,000 in the case of deceased individuals and $25,000 in the case of severely injured individuals who required hospitalization for one week or more.

To qualify for advance benefits, applicants must complete a short form (the "Eligibility Form") identifying basic eligibility and indicating that advance benefits would assist them in confronting current or immediate financial hardships. Such forms will be made available at claims intake centers as they are established, in response to telephone requests (888–714–3385, 202–305–1352, TDD: 888–560–0844), and on the Victims Compensation Fund Web site at *www.usdoj.gov/victimcompensation.*

Eligible claimants may apply for and receive advance benefits and then file their lengthier "Personal Injury Compensation Form" or "Death Compensation Form" at any time within the two-year time frame for filing claims under the program. This will allow needy eligible claimants to obtain prompt advance payments even though they may need more time to collect full information regarding the amount of compensation they seek. The 120-day period for determination of compensation will be stayed or tolled until the claimant files the completed "Personal Injury Compensation Form" or "Death Compensation Form" needed to allow the Special Master to determine the amount of the final award. However, once a claimant applies for Advance Benefits, the claimant will be deemed to have waived the right to file a civil action in state or federal court for damages sustained as a result of the September 11 attacks.

Advance benefits will be treated as advance payments on ultimate awards from the Fund. Thus, the amount of any advance benefits received will be deducted from the claimant's subsequent award.

E. Final Awards Made by the Fund

Section 405(b) of the Act provides that the Special Master shall compensate eligible claimants based on the harm to the claimant (including both economic loss and noneconomic losses), the facts of the claim, and the individual circumstances of the claimant. The Act further provides that the Special Master shall determine the claimant's eligibility and the amount of compensation within 120 days.

The Special Master and the Department have studied the language of the Act, the varying public comments, evidence and data about the many victims of the September 11 attacks, and economic and demographic studies and data in fashioning the interim final rule. After this careful consideration, the Special Master and the Department have concluded that the following principal objectives should guide any determination of economic and noneconomic losses.

The first objective is that the process should be efficient, straightforward, and understandable to the claimants. This objective is based in part upon the statutory requirement that the Special Master review each claim and make an award determination within 120 days of filing. More important, however, is that claimants be able to enter the program—or choose not to enter the program—with an understanding of how their claims will be treated. This is especially important because the Act provides that, upon submission of a claim, a claimant waives the right to file a civil action for damages sustained as a result of the September 11 attacks. For claimants to make an informed decision regarding this waiver, they should have some understanding of how their award will be calculated and how much they would receive from the Fund should they decide to file a claim.

The second objective is that each claimant should, to the greatest extent possible, be treated fairly based on the claimant's own individual circumstances and relative to other claimants. While the circumstances of death for many victims will differ, those circumstances will in many cases be unknowable. In principle, similarly situated claimants should not receive dramatically differing treatment.

After careful consideration, the Special Master and the Department have concluded that, in order best to achieve these principal objectives, the Special Master should develop a methodology for calculating *presumed* economic and noneconomic losses that is based on readily identifiable individual circumstances for each claimant, such as age, prior income levels, marital status, and the number and ages of the victim's dependents. A methodology for determining presumed economic and noneconomic losses will also assist the Special Master in making fair and appropriate compensation determinations swiftly and efficiently within the time frame permitted by the Act.

In order to enable claimants to make informed decisions regarding whether to submit a claim under the Fund and, if so, whether to submit evidence of extraordinary individual circumstances that could justify departure from the presumed awards, the interim final rule directs the Special Master to publish schedules, tables, or charts of presumed determinations for economic and noneconomic losses. While these schedules, tables, or charts cannot cover every possible claimant (e.g., injured claimants), they are extensive and detailed enough to provide the majority of potential claimants with a general dollar range into which their awards may fall.

Nonetheless, the Special Master and the Department recognize that it will be impossible to fashion a presumptive methodology that will take into account *all* of the individual facts and circumstances for every claimant. Rather, some claimants may have extraordinary individual circumstances that justify departure from the presumed awards. Thus, the interim final rule provides that claimants may request that the Special Master depart from the presumed economic and noneconomic losses based upon a demonstration of extraordinary circumstances that the presumed award methodology does not adequately address.

*Economic loss:* Determination of economic loss requires a prediction about each claimant's future. This assessment will be, by its nature, somewhat speculative. While the determination of economic loss should be based upon facts regarding the individual victim where those facts are available, some facts cannot be predicted on an individualized basis.

The regulations also provide that the Special Master's schedules, tables, or charts should identify presumed determinations of economic loss up to a salary level commensurate with the 98th percentile of individual income in the United States. The Department recognizes that projecting earnings over worklife for people with extraordinary annual incomes is a very complex exercise, often requiring a detailed evaluation of variable and often complex formulae for nonvariable income, differing work life expectations, often highly volatile industries or markets, and other factors that are not often subject to easy generalization. We have also concluded that the purpose of the Act is not simply to examine economic and noneconomic harm, but also to provide compensation that is just and appropriate in light of the financial needs and resources of claimants. Any methodology that does nothing more than attempt to replicate a theoretically possible future income stream would lead to awards that would be insufficient relative to the needs of some victims' families, and excessive relative to the needs of others. Therefore, a claimant should not assume that he or she will receive an award greater than the presumed award simply because the victim had an income that exceeded the income for the 98th percentile. Indeed, the Act's requirement that the Special Master consider "the individual circumstances of the claimant" indicates that the Special Master may consider a particular claimant's financial needs and resources, just as the Department and the Special Master considered the needs of the claimants in concluding that no claimant bringing a claim on behalf of a deceased victim should receive less than $500,000 or $300,000 before collateral source offsets.

If a claimant seeks review of a presumed award, the Special Master may consider a range of information, including demographic information on retirement trends for high wage earners, the individual's historical expenses, savings, and any other factors he deems relevant, including economic trends, information available from the Bureau of Labor Statistics, the Census Bureau and other entities on average income and retirement age for the victim's profession or even for the victim's former employer. Claimants should not expect awards grossly in excess of the highest awards listed on the Special Master's presumed award chart, as the individual circumstances of the wealthiest and highest-income claimants will often indicate that multi-million dollar awards out of the public coffers are not necessary to provide them with a strong economic foundation from which to rebuild their lives.

The Special Master and the Department recognize that the extent of physical injury for those victims who survived the September 11 attacks may vary to a degree that does not lend itself to a schedule, table, or chart. If the claimant's injury causes only a temporary disability, the Special Master may consider evidence regarding the length of time the claimant was absent from his employment in determining the appropriate compensation for economic loss. For those victims who suffered permanent physical disability, the Special Master may rely upon his economic loss methodology, but adjust the award based upon the extent of the physical disability. In evaluating claims of disability, the Special Master will, in general, make a determination regarding whether the claimant is capable of performing his or her usual profession in light of the injuries.

With respect to claims of total permanent disability, the Special Master may accept a determination of disability made by the Social Security Administration as evidence of disability without any further medical evidence or review. The Special Master may also consider determinations of permanent total disability made by other governmental agencies or private insurers in evaluating the claim. The Special Master may require an evaluation of the claimant's disability and ability to perform his or her occupation from medical experts.

With respect to claims of partial disability, the Special Master may consider evidence of the effect of the partial disability on the claimant's ability to perform his or her usual occupation as well as the effect of the partial disability on the claimant's ability to participate in usual daily activities.

*Noneconomic losses:* Each person who was killed or injured in the September 11 attacks suffered grievous harm, and each person experienced the unspeakable events of that day in a unique way. Some victims experienced terror for many minutes, as they were held hostage by terrorists on an airplane or trapped in a burning building. Some victims had no warning of what was coming and died within seconds of a plane hitting the building in which they worked. While these circumstances may be knowable in a few extraordinary circumstances, for the vast majority of victims these circumstances are unknowable.

After extensive fact finding, public outreach, and review of public comments, the Special Master and the Department have concluded that the most rational and just way to approach the imponderable task of placing a dollar amount upon the pain, emotional suffering, loss of enjoyment of life, and mental anguish suffered by the thousands of victims of the September 11 attacks is to assess the noneconomic losses for categories of claimants. The most obvious distinction is between those who died and those who suffered physical injury but survived.

The regulations therefore set a presumed award for noneconomic losses sustained. For those victims who died as a result of the September 11 aircraft crashes, the presumed noneconomic losses will be $250,000, plus an additional $50,000 for the spouse and each dependent of the deceased victim. That $250,000 figure is roughly equivalent to the amounts received under existing federal programs by public safety officers who are killed while on duty, or members of our military who are killed in the line of duty while serving our nation. *See* 38 U.S.C. 1967 (military personnel); 42 U.S.C. 3796 (Public Safety Officers Benefit Program). The latter figures—$50,000 for the spouse and each dependent—include a noneconomic component of "replacement services loss."

For those victims who suffered physical injury but survived the September 11 attacks, the Special Master may establish a methodology for estimating their noneconomic losses. The Special Master may determine that it is appropriate to give some percentage of the noneconomic loss award given for victims who died, based upon the extent of the injury.

The Special Master and the Department recognize, however, that no presumed award can take into account all of the unique individual circumstances of each claimant. Accordingly, as noted above, claimants may either accept the presumed award or instead attempt to demonstrate in a hearing before the Special Master extraordinary circumstances that justify departure from the presumed award.

*Collateral Sources:* Section 405(b)(6) of the Act provides that the Special Master *shall* reduce the amount of compensation by the amount of the collateral source compensation "a claimant has received or is entitled to receive" as a result of the terrorist-related aircraft crashes of September 11, 2001. The interim final rule provides that collateral sources will include life insurance, pension funds, death benefit programs, and payments by federal, state, or local governments related to the terrorist-related aircraft crashes of September 11, 2001. While many public commenters voiced strong opposition to the inclusion of some or all of these as collateral source compensation, the Act expressly includes each one within the definition of "collateral sources."

At the same time, the Act does not address whether certain other types of payments constitute collateral source compensation. The interim final rule provides that the following are *not* collateral source compensation:

(1) The value of services or in-kind charitable gifts such as provision of emergency housing, food, or clothing; and

(2) Charitable donations distributed to the beneficiaries of the decedent, to the injured claimant, or to the beneficiaries of the injured claimant by private charitable entities; provided, however, that the Special Master may determine that funds provided to victims or their families through a private charitable entity constitute, in substance, a collateral source as described above.

The Department has concluded that charitable contributions should not be considered collateral source compensation within the meaning of the Act because, among other reasons, such charitable contributions are different in kind from the collateral sources listed in the Act. Moreover, because the collateral offset only applies to collateral source compensation that the claimant has received or is entitled to receive, deducting charitable awards from the amount of compensation would have the perverse effect of encouraging potential donors to withhold their giving until after claimants have received their awards from the Fund.

F. The Claims Evaluation Process

Section 405(b)(4) of the Act provides that a claimant, after the filing of the claim, has the right to present evidence to the Office of the Special Master. The statute specifically provides that the claimant has the right to present witness statements and documents, the right to obtain legal counsel, and such other due process rights as are determined to be appropriate by the Special Master.

The interim final regulations provide claimants with a choice of two Procedural Options—Track A or Track B. If a claimant selects *Track A*, the Claims Evaluator will determine eligibility and the claimant's presumed award and, within 45 days of the date the claim was deemed filed, notify the claimant in writing of the eligibility determination, the amount of the presumed award, and the right to request a hearing before the Special Master or his designee under § 104.33 of these regulations. After an eligible claimant has been notified of the presumed award, the claimant may either accept the presumed compensation determination as the final determination and request payment, or may instead request a review before the Special Master or his designee pursuant to § 104.33. If a claimant opts for a review, the claimant may make supplemental submissions. The Special Master may alter or modify the award if the presumed award was calculated erroneously, or if the claimant demonstrates extraordinary circumstances indicating that the presumed award does not adequately address the claimant's injury. There will be no further review or appeal from this determination.

If the claimant selects *Track B*, a Claims Evaluator will determine eligibility within 45 days of the date the claim was deemed filed, but shall not determine the claimant's presumed award. The Claims Evaluator will then notify the claimant in writing of the eligibility determination. Upon notification of eligibility, the claimant will proceed to a hearing pursuant to § 104.33. At such hearing, the Special Master or his designee will utilize the presumed award methodology, but may modify or vary the award if the claimant presents extraordinary circumstances not adequately addressed by the presumed award methodology. There shall be no review or appeal from this determination.

Hearings, when sought, will be held by the Special Master or his designee. These hearings shall be conducted in a nonadversarial manner, the objective of which will be to permit the claimant to present information or evidence that the claimant believes is necessary to a full understanding of the claim. Claimants will be permitted, but not required, to present witnesses, including expert witnesses. The hearing officer shall be permitted to examine the credentials of experts.

The hearings shall be limited in length to a time period determined by the Special Master or the relevant hearing officer, but generally not to exceed two hours. The hearings shall, to the extent practicable, be scheduled at times and in locations convenient to the claimant or his or her representative. The claimant shall be entitled to be represented by an attorney in good standing, but it is not necessary that the claimant be represented by an attorney.

G. Assistance to Claimants

In its November 5, 2001 Notice of Inquiry, the Department noted that section 405(a) of the Act establishes some specific requirements with respect to the claim form and the information to be included. The law requires the Special Master to develop a claim form to use in filing claims for compensation under this program. The Special Master is to ensure that the form can be filed electronically if it is determined to be practicable. Moreover, by law, the form must include a statement of the factual basis for eligibility and information regarding income in recent years. In addition, the form is to request information from the claimant as to: (1) The physical harm suffered by a victim, or information confirming the death of the victim, as a result of the terrorist-related aircraft crashes of September 11, 2001; (2) income tax returns for recent years and other records; and (3) documentation regarding collateral source compensation including life insurance policies and government or employment-related programs which have or may provide funds or benefits to the claimant.

The Department believes that it is important that this Fund be accessible to potential claimants who have limited resources and who are not trained in the law. Rather than attempt to address in detail the means by which the Special Master should provide assistance to claimants, these regulations leave the Special Master with discretion to implement steps to provide assistance to claimants and to make this Fund accessible to them.

Because the Act does not provide for payment of legal or other fees by the Fund, these regulations do not impose any limits on the types or amount of fees that claimants may pay their attorneys or others providing assistance. Although the Department's regulations do not set specific limits on attorneys fees separate from those existing in state law or attorney ethical standards, the Department believes that contingency arrangements exceeding 5% of a claimant's recovery from the Fund would not be in the best interest of the claimants.

The Department contemplates that the Special Master will have discretion to inform potential claimants of the nature of the Fund so that they may make informed decisions regarding the types or amount of fees that they pay for legal or other assistance. For example, the Special Master may notify claimants and potential claimants of the availability of free legal services. Likewise, the Special Master may inform claimants and potential claimants that the Fund is a no-fault, administrative scheme that should not involve the kind of risks and expense that would justify any significant contingency fees.

These regulations similarly do not address the manner in which claimants may use funds that they receive from the Fund, except that the Personal Representatives must agree in an acknowledgment and release form to distribute the award to the beneficiaries of the decedent in accordance with the decedent's will or applicable state law or ruling by a court of competent jurisdiction. While the Department does not believe that it is appropriate for the Special Master to place further legal restrictions on the claimants' or beneficiaries' use of payments from the Fund, the Department does contemplate that the Special Master will have discretion to provide claimants with information regarding annuities or other financial planning devices or to offer structured awards with periodic payments.

*Application of Various Laws and Executive Orders to This Rulemaking*

Administrative Procedure Act, 5 U.S.C. 553

This rule provides for compensation to eligible individuals who were physically injured and to the personal representatives of those who were killed as a result of the terrorist-related aircraft crashes of September 11, 2001. In order to provide compensation to eligible claimants as expeditiously as possible, Congress set a short 90-day deadline for the issuance of these regulations. The Department did seek public input on the issues, but it was not possible for the Department to prepare and publish a proposed rule for notice and comment within that very short time period.

The APA provides that an agency need not go through proposed rulemaking and comment before issuing rules to implement benefits programs. 5 U.S.C. 553(a)(2). Moreover, the Department, in consultation with the Special Master, determined that taking the time to draft and publish a proposed rule for notice and comment before this rule took effect would have been impracticable in light of the short time between the enactment of the statute and the deadline for rulemaking, and also would have been contrary to the public interest, which strongly favors prompt disbursement of benefits. Accordingly, the Department has determined that there is "good cause" for exempting this rule from the provision of the Administrative Procedure Act that requires a notice of proposed rulemaking and the opportunity for public comment. 5 U.S.C. 553(b)(B).

For the same reasons, the Department also finds "good cause" for exempting this rule from the provision of the Administrative Procedure Act providing for a delayed effective date. 5 U.S.C. 553(d). Delaying the opportunity for eligible claimants to seek Advance Benefits or to file claims under the Act would be contrary to the public interest.

Congressional Review Act

The Administrator of the Office of Information and Regulatory Affairs of the Office of Management and Budget has designated this interim final rule as a "major rule" as that term is defined by the Congressional Review Act ("CRA"), 5 U.S.C. 801 *et. seq.* Pursuant to section 808(2) of the CRA, the Department finds that "good cause" exists for establishing an effective date for this rule upon publication because delay would be impracticable in light of the short time between the enactment of the statute and the deadline for rulemaking, and also would be contrary to the public interest favoring prompt disbursement of benefits.

Paperwork Reduction Act of 1995

The Department of Justice, Civil Division, has submitted the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the emergency review procedures of the Paperwork Reduction Act of 1995. OMB approval has been granted, and this information collection

has been assigned OMB control number 1105–0073. The proposed information collection is published to obtain comments from the public and affected agencies. The emergency approval is only valid for 180 days. Comments should be directed to OMB, Office of Information and Regulatory Affairs, Attention: Department of Justice Desk Officer, Washington, DC 20530.

During the first 60 days of this same review period, a regular review of this information collection will be undertaken. All comments and suggestions, or questions regarding additional information, including obtaining a copy of the proposed information collection instrument with instructions, should be directed to Office of the Special Master, U.S. Department of Justice, 950 Pennsylvania Avenue, NW., Washington, DC 20530. We request written comments and suggestions from the public and affected agencies concerning the proposed emergency collection of information.

Your comments should address one or more of the following four points:

(1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of This Information Collection

(1) *Type of Information Collection:* New Collection.

(2) *Title of the Form/Collection:* Registration/Eligibility Form and Application for Emergency Benefits from the Victim Compensation Fund.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection: Form Number:* SM–001, Office of the Special Master, Department of Justice.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract: Primary:* Individuals who were physically injured and personal representatives of those killed as a result of the terrorist-related aircraft crashes of September 11, 2001. Abstract: The information collected from the Registration/Eligibility Form and Application for Emergency Benefits from the Victim Compensation Fund will be used to make advance payments to those claimants deemed eligible by the Special Master or his designee.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* 5,000 claimants with an average of 6.0 hours per response.

(6) *An estimate of the total public burden (in hours) associated with the collection:* 30,000 hours annually.

If additional information is required, contact: Robert B. Briggs, Department Clearance Officer, Information Management and Security Staff, Justice Management Division, United States Department of Justice, 601 D Street NW, Suite 1600, Washington, D.C. 20004.

Privacy Act of 1974

The Department of Justice, Civil Division is establishing a new Privacy Act system of records entitled "September 11th Victim Compensation Fund of 2001, JUSTICE/CIV–008." By law, regulations addressing certain administrative matters for the September 11th Victim Compensation Fund of 2001 must be issued within the 90-day period established by Congress. The Privacy Act notice will be published with no routine uses, so that it will be effective on the date published. It is likely that amendments to this notice, including routine uses, will be published at a later date, with the opportunity to comment. In the interim, disclosures necessary to process claims will be made only with the written consent of claimants or as otherwise authorized under 5 U.S.C. 552a(b).

Regulatory Flexibility Act

These regulations set forth procedures by which the Federal government will award compensation benefits to eligible victims of the September 11, 2001 terrorist attacks. Under 5 U.S.C. 601(6), the term "small entity" does not include the Federal government, the party charged with incurring the costs attendant to the implementation and administration of the Victims Compensation Fund. To the extent that small entities, including small government entities, will be economically affected by the promulgation of these regulations, such effects will likely be minimal. Further, the number of entities that will be affected will, in all probability, fall short of a "substantial number" of small entities. In fact, the Department believes that the promulgation of these rules will play a considerable role in reducing the amount of complex, private litigation, wherein a substantial number of small (and large) entities would undoubtedly be significantly impacted.

Accordingly, the Department has reviewed this rule in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)) and by approving it certifies that this rule will not have a significant economic impact on a substantial number of small entities because it provides compensation to eligible individuals who were physically injured as a result of the terrorist-related aircraft crashes of September 11, 2001, and compensation through a "personal representative" for those who were killed as a result of those crashes. This rule provides compensation to individuals, not to entities.

Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by State, local and tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more in any one year, and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Executive Order 12866—Regulatory Planning and Review

This regulation has been drafted and reviewed in accordance with Executive Order 12866, "Regulatory Planning and Review," section 1(b), Principles of Regulation. The Department of Justice has determined that this rule is a "significant regulatory action" under Executive Order 12866, section 3(f), Regulatory Planning and Review, and accordingly this rule has been reviewed by the Office of Management and Budget.

Executive Order 13132—Federalism

This regulation will not have substantial direct effects on the States, on the relationship between the national government and the States, or on distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 13132, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. However, the Department of Justice has worked cooperatively with state and local officials in the affected communities in the preparation of this rule. Also, the

Department individually notified national associations representing elected officials of the initial request for comment and will be taking similar action in connection with the interim final rule.

**List of Subjects in 28 CFR Part 104**

Disaster assistance, Disability benefits, Terrorism.

Accordingly, for the reasons set forth in the preamble, Part 104 of chapter I of Title 28 of the Code of Federal Regulations is added to read as follows:

## PART 104—SEPTEMBER 11TH VICTIM COMPENSATION FUND OF 2001



**Authority:** Title IV of Pub. L. 107–42, 115 Stat. 230, 49 U.S.C. 40101 note.

### Subpart A—General; Eligibility

**§ 104.1 Purpose.**

This part implements the provisions of the September 11th Victim Compensation Fund of 2001, Title IV of Public Law 107–42, 115 Stat. 230 (Air Transportation Safety and System Stabilization Act) to provide compensation to eligible individuals who were physically injured as a result of the terrorist-related aircraft crashes of September 11, 2001, and to the "personal representatives" of those who were killed as a result of the crashes. All compensation provided through the Fund will be on account of personal physical injuries or death.

**§ 104.2 Eligibility definitions and requirements.**

(a) *Eligible claimants.* The term *eligible claimants* means:

(1) Individuals present at the World Trade Center, Pentagon, or Shanksville, Pennsylvania site at the time of or in the immediate aftermath of the crashes and who suffered physical harm, as defined herein, as a direct result of the terrorist-related aircraft crashes;

(2) The Personal Representatives of deceased individuals aboard American Airlines flights 11 or 77 and United Airlines flights 93 or 175; and

(3) The Personal Representatives of individuals who were present at the World Trade Center, Pentagon, or Shanksville, Pennsylvania site at the time of or in the immediate aftermath of the crashes and who died as a direct result of the terrorist-related aircraft crash.

(4) The term eligible claimants does not include any individual or representative of an individual who is identified to have been a participant or conspirator in the terrorist-related crashes of September 11.

(b) *Immediate aftermath.* The term *immediate aftermath* of the crashes shall mean, for purposes of all claimants other than rescue workers, the period of time from the crashes until 12 hours after the crashes. With respect to rescue workers who assisted in efforts to search for and recover victims, the immediate aftermath shall include the period from the crashes until 96 hours after the crashes.

(c) *Physical harm.*

(1) The term *physical harm* shall mean a physical injury to the body that was treated by a medical professional within 24 hours of the injury having been sustained or within 24 hours of rescue; and

(i) Required hospitalization as an in-patient for at least 24 hours; or

(ii) Caused, either temporarily or permanently, partial or total physical disability, incapacity or disfigurement.

(2) In every case not involving death, the physical injury must be verified by contemporaneous medical records created by or at the direction of the medical professional who provided the medical care.

(d) *Personal Representative.* The term *Personal Representative* shall mean the person determined to be the Personal Representative under § 104.4 of this part.

(e) *Present at the site.* The term *present at the site* (i.e., the World Trade Center, Pentagon, or Shanksville, Pennsylvania site) shall mean physically present at the time of the crashes or in the immediate aftermath:

(1) In the buildings or portions of buildings that were destroyed as a result of the airplane crashes; or

(2) In any area contiguous to the crash sites that the Special Master determines was sufficiently close to the site that there was a demonstrable risk of physical harm resulting from the impact of the aircraft or any subsequent fire, explosions, or building collapses (generally, the immediate area in which the impact occurred, fire occurred, portions of buildings fell, or debris fell upon and injured persons).

**§ 104.3 Other definitions.**

(a) *Beneficiary.* The term *beneficiary* shall mean a person entitled under the laws of the decedent's domicile to receive payments or benefits from the estate of or on behalf of the decedent on whose behalf the claim to the Fund was filed.

(b) *Dependents.* The Special Master shall identify as dependents those persons so identified by the victim on his or her federal tax return for the year 2000 unless:

(1) The claimant demonstrates that a minor child of the victim was born or adopted on or after January 1, 2001;

(2) Another person became a dependent in accordance with then-applicable law on or after January 1, 2001; or

(3) The victim was not required by law to file a federal income tax return for the year 2000.

(c) *Spouse.* The Special Master shall identify as the spouse of a victim the person reported as spouse on the victim's federal tax return for the year 2000 unless:

(1) The victim was married or divorced in accordance with applicable state law on or after January 1, 2001; or

(2) The victim was not required by law to file a federal income tax return for the year 2000.

(d) *The Act. The Act*, as used in this part, shall mean Public Law 107–42, 115 Stat. 230 ("Air Transportation Safety and System Stabilization Act"), 49 U.S.C. 40101 note.

(e) *Victim.* The term *victim* shall mean an eligible injured claimant or a decedent on whose behalf a claim is brought by an eligible Personal Representative.

**§ 104.4 Personal Representative.**

(a) *In general.* The Personal Representative shall be:

(1) An individual appointed by a court of competent jurisdiction as the Personal Representative of the decedent or as the executor or administrator of the decedent's will or estate.

(2) In the event that no Personal Representative or executor or administrator has been appointed by any court of competent jurisdiction, and such issue is not the subject of pending litigation or other dispute, the Special Master may, in his discretion, determine that the Personal Representative for purposes of compensation by the Fund is the person named by the decedent in the decedent's will as the executor or administrator of the decedent's estate. In the event no will exists, the Special Master may, in his discretion, determine that the Personal Representative for purposes of compensation by the Fund is the first person in the line of succession established by the laws of the decedent's domicile governing intestacy.

(b) *Notice to beneficiaries.* Any purported Personal Representative must, before filing an Eligibility Form, provide written notice of the claim (including a designated portion of the Eligibility Form) to the immediate family of the decedent (including, but not limited to, the decedent's spouse, former spouses, children, other dependents, and parents), to the executor, administrator, and beneficiaries of the decedent's will, and to any other persons who may reasonably be expected to assert an interest in an award or to have a cause of action to recover damages relating to the wrongful death of the decedent. Personal delivery or transmission by certified mail, return receipt requested, shall be deemed sufficient notice under this provision. The claim forms shall require that the purported Personal Representative certify that such notice (or other notice that the Special Master deems appropriate) has been given. In addition, as provided in § 104.21(b)(5) of this part, the Special Master may publish a list of individuals who have filed Eligibility Forms and the names of the victims for whom compensation is sought, but shall not publish the content of any such form.

(c) *Objections to Personal Representatives.* Objections to the authority of an individual to file as the Personal Representative of a decedent may be filed with the Special Master by parties who assert a financial interest in the award up to 30 days following the filing by the Personal Representative. If timely filed, such objections shall be treated as evidence of a "dispute" pursuant to paragraph (d) of this section.

(d) *Disputes as to identity.* The Special Master shall not be required to arbitrate, litigate, or otherwise resolve any dispute as to the identity of the Personal Representative. In the event of a dispute over the appropriate Personal Representative, the Special Master may suspend adjudication of the claim or, if sufficient information is provided, calculate the appropriate award and authorize payment, but place in escrow any payment until the dispute is resolved either by agreement of the disputing parties or by a court of competent jurisdiction. Alternatively, the disputing parties may agree *in writing* to the identity of a Personal Representative to act on their behalf, who may seek and accept payment from the Fund while the disputing parties work to settle their dispute.

**§ 104.5 Foreign claims.**

In the case of claims brought by or on behalf of foreign citizens, the Special Master may alter the requirements for documentation set forth herein to the extent such materials are unavailable to such foreign claimants.

**§ 104.6 Amendments to this rule.**

In the event that amendments are subsequently made to any section of this Part, claimants are entitled to have their claims processed in accordance with the provisions that were in effect at the time that their claims were submitted under § 104.21(d).

**Subpart B—Filing for Compensation; Application for Advance Benefits**

**§ 104.21 Filing for compensation.**

(a) *Compensation form; "filing."* Except for applications for Advance Benefits pursuant to § 104.22, no claim may be considered until the claimant has submitted both an "Eligibility Form" *and* either a "Personal Injury Compensation Form" or a "Death Compensation Form." A claim shall be deemed "filed" for purposes of section 405(b)(3) of the Act (providing that the Special Master shall issue a determination not later than 120 days after the date on which a claim is filed), and for any time periods in this part, when a Claims Evaluator determines that both the Eligibility Form and either a Personal Injury Compensation Form or a Death Compensation Form are substantially complete. *Provided*, however, that if a claimant files an Eligibility Form requesting Advance Benefits pursuant to § 104.22 of this part without filing either a "Personal Injury Compensation Form" or a "Death Compensation Form," the claim shall be deemed "filed" when the Claims Evaluator determines that the Eligibility Form is substantially complete, but the time period for determination and any time periods in this part shall be stayed or tolled as described in § 104.22(g) of this part.

(b) *Eligibility Form.* The Special Master shall develop an Eligibility Form that will require the claimant to provide information necessary for determining the claimant's eligibility to recover from the Fund.

(1) The Eligibility Form may require that the claimant certify that he or she has dismissed any pending lawsuit seeking damages as a result of the terrorist-related airplane crashes of September 11, 2001 (except for actions seeking collateral source benefits) within 90 days of the effective date of this part pursuant to section 405(c)(3)(B)(ii) of the Act and that there is no pending lawsuit brought by a dependent, spouse, or beneficiary of the victim.

(2) The Special Master may require as part of the notice requirement pursuant to § 104.4(b) that the claimant provide copies of a designated portion of the Eligibility Form to the immediate family of the decedent (including, but not limited to, the spouse, former spouses, children, other dependents, and parents), to the executor, administrator, and beneficiaries of the decedent's will, and to any other persons who may reasonably be expected to assert an interest in an award or to have a cause of action to recover damages relating to the wrongful death of the decedent.

(3) The Eligibility Form may require claimants to provide the following proof:

(i) Proof of death: Death certificate or similar official documentation;

(ii) Proof of presence at site: Documentation sufficient to establish presence at one of the crash sites, which may include, without limitation, a death certificate, records of employment, contemporaneous medical records, contemporaneous records of federal, state, city or local government, an affidavit or declaration of the decedent's or injured claimant's employer, or other

sworn statement (or unsworn statement complying with 28 U.S.C. 1746) regarding the presence of the victim;

(iii) Proof of death on board aircraft: Death certificate or records of American or United Airlines or other sufficient official documentation;

(iv) Proof of physical harm: Contemporaneous medical records of hospitals, clinics, physicians, licensed medical personnel, or registries maintained by federal, state, or local government, and records of all continuing medical treatment;

(v) Personal Representative: Copies of relevant legal documentation, including court orders; letters testamentary or similar documentation; proof of the purported Personal Representative's relationship to the decedent; copies of wills, trusts, or other testamentary documents; and information regarding other possible beneficiaries as requested by the Eligibility Form;

(vi) Any other information that the Special Master deems necessary to determine the claimant's eligibility.

(4) The Special Master may also require waivers, consents, or authorizations from claimants to obtain directly from third parties tax returns, medical information, employment information, or other information that the Special Master deems relevant in determining the claimant's eligibility or award, and may request an opportunity to review originals of documents submitted in connection with the Fund.

(5) Application for Advance Benefits: The Eligibility Form shall include a section allowing claimants to indicate that they wish to apply for Advance Benefits. Claimants who apply for such Advance Benefits must certify on that Form that they have not yet received $450,000 in collateral source compensation if they are bringing a claim on behalf of a deceased victim with a spouse or dependent, $250,000 in collateral source compensation if they are bringing a claim on behalf of a deceased victim who was single with no dependents, or an amount in excess of their lost wages plus out-of-pocket medical expenses if they are an injured claimant. All such claimants also must state on the Form facts establishing financial hardship that would justify a determination that they are in need of Advance Benefits.

(6) The Special Master may publish a list of individuals who have filed Eligibility Forms and the names of the victims for whom compensation is sought, but shall not publish the content of any such form.

(c) *Personal Injury Compensation Form and Death Compensation Form.* The Special Master shall develop a Personal Injury Compensation Form that each injured claimant must submit. The Special Master shall also develop a Death Compensation Form that each Personal Representative must submit. These forms shall require the claimant to provide certain information that the Special Master deems necessary to determining the amount of any award, including information concerning income, collateral sources, benefits, and other financial information, and shall require the claimant to state the factual basis for the amount of compensation sought. It shall also allow the claimant to submit certain other information that may be relevant, but not necessary, to the determination of the amount of any award.

(1) Claimants shall, at a minimum, submit all tax returns that were filed for the years 1998, 1999, and 2000. The Special Master may, at his discretion, require that claimants submit copies of tax returns or other records for any other period of years he deems appropriate for determination of an award. The Special Master may also require waivers, consents, or authorizations from claimants to obtain directly from third parties medical information, employment information, or other information that the Special Master deems relevant to determining the amount of any award.

(2) Claimants may attach to the "Personal Injury Compensation Form" or "Death Compensation Form" any additional statements, documents or analyses by physicians, experts, advisors, or any other person or entity that the claimant believes may be relevant to a determination of compensation.

(d) *Submission of a claim.* Section 405(c)(3)(B) of the Act provides that upon the submission of a claim under the Fund, the claimant waives the right to file a civil action (or to be a party to an action) in any Federal or State court for damages sustained as a result of the terrorist-related aircraft crashes of September 11, 2001, except for civil actions to recover collateral source obligations. A claim shall be deemed submitted for purposes of section 405(c)(3)(B) of the Act when the claim is deemed filed pursuant to § 104.21, regardless of whether any time limits are stayed or tolled.

(e) *Provisions of information by third parties.* Any third party having an interest in a claim brought by a Personal Representative may provide written statements or information regarding the Personal Representative's claim. The Claims Evaluator or the Special Master or his designee may, at his or her discretion, include the written statements or information as part of the claim.

**§ 104.22 Advance Benefits.**

(a) *Advance Benefits.* Eligible Claimants may apply for immediate "Advance Benefits" in a fixed amount as follows:

(1) $50,000 for Personal Representatives; and

(2) $25,000 for injured claimants who meet the requirements of paragraph (d) of this section.

(b) *Credit against award.* The Advance Benefit shall be credited against any final compensation award so that the amount of the Advance Benefit is deducted from the final award under this program.

(c) *Application for Advance Benefits.* An otherwise eligible claimant may seek Advance Benefits to alleviate financial hardship faced by the claimant (or financial hardship faced by the beneficiaries of the decedent) by submitting an Eligibility Form described in § 104.21(b) and indicating thereon that he or she is applying for Advance Benefits.

(d) *Eligibility for Advance Benefits.* In the case of a Personal Representative, the claimant may be deemed eligible for Advance Benefits if a Claims Evaluator or the Special Master or his designee determines that the claimant is eligible to recover under the Fund. In the case of an injured claimant, the claimant may be deemed eligible for Advance Benefits when the Special Master or his designee determines that the claimant is eligible to recover under the Fund *and* that the claimant's physical injury required hospitalization for one week or more.

(e) *Authorization of payments.*

(1) Payment in the amount described in paragraph (a) of this section will be authorized immediately upon a determination that the claimant is eligible for Advance Benefits and the claimant is:

(i) An injured claimant;

(ii) A Personal Representative who was the spouse of the deceased victim on September 11, 2001; or

(iii) A Personal Representative who has obtained the consent of the spouse of the deceased victim (or, if there is no surviving spouse, all of the dependents of the deceased victim) to file for Advance Benefits.

(2)(i) With respect to other Personal Representatives, payment will be authorized within 15 days after the determination that the claimant is eligible for Advance Benefits, provided that no other individual has asserted a colorable conflicting claim as the Personal Representative with respect to the decedent and the Personal

Representative identifies and has given notice to the beneficiaries to whom such Advance Benefits will be distributed.

(ii) In the event that a colorable conflicting claim has been asserted, no Advance Benefit will be paid until a final eligibility determination has been made.

(f) *Tolling of 120-day clock and other time periods.* A claimant filing an Eligibility Form requesting Advance Benefits before filing a Personal Injury Compensation Form or Death Compensation Form will be deemed to have waived his right to commencement of the 120-day period in section 405(b)(3) of the Act (providing that the Special Master shall provide notice to the claimant of his determination within 120 days after the date on which a claim is filed). The 120-day period and all other time limitations in this part, except those applicable to Advance Benefit payments, shall be stayed or tolled until such time that a Claims Evaluator determines that the claimant's Personal Injury Compensation Form or Death Compensation Form is substantially complete.

## Subpart C—Claim Intake, Assistance, and Review Procedures

### § 104.31 Procedure for claims evaluation.

(a) *Initial review.* Claims Evaluators shall review the forms filed by the claimant and either deem the claim "filed" (pursuant to 104.21(a)) or notify the claimant of any deficiency in the forms or any required documents.

(b) *Procedural tracks.* Each claim will be placed on a procedural track, described herein as "Track A" and "Track B," selected by the claimant on the Personal Injury Compensation Form or Death Compensation Form.

(1) *Procedure for Track A.* The Claims Evaluator shall determine eligibility and the claimant's presumed award pursuant to §§ 104.43 to 104.46 of this part and, within 45 days of the date the claim was deemed filed, notify the claimant in writing of the eligibility determination, the amount of the presumed award, and the right to request a hearing before the Special Master or his designee under § 104.33 of this part. After an eligible claimant has been notified of the presumed award, the claimant may either accept the presumed compensation determination as the final determination and request payment, or may instead request a review before the Special Master or his designee pursuant to § 104.33. Claimants found to be ineligible may appeal pursuant to § 104.32.

(2) *Procedure for Track B.* The Claims Evaluator shall determine eligibility within 45 days of the date the claim was deemed filed, but shall not determine the claimant's presumed award; the Claims Evaluator shall notify the claimant in writing of the eligibility determination. Upon notification of eligibility, the claimant will proceed to a hearing pursuant to § 104.33. At such hearing, the Special Master or his designee shall utilize the presumptive award methodology as set forth in §§ 104.43 to 104.46 of this part, but may modify or vary the award if the claimant presents extraordinary circumstances not adequately addressed by the presumptive award methodology. There shall be no review or appeal from this determination.

(c) *Multiple claims from the same family.* The Special Master may treat claims brought by or on behalf of two or more members of the same immediate family as related or consolidated claims for purposes of determining the amount of any award.

### § 104.32 Eligibility review.

Any claimant deemed ineligible by the Claims Evaluator may appeal that decision to the Special Master or his designee by filing an eligibility appeal on forms created by the office of the Special Master.

### § 104.33 Hearing.

(a) *Supplemental submissions.* The claimant may prepare and file Supplemental Submissions within 21 calendar days from notification of either the presumed award (Track A) or eligibility (Track B). The Special Master shall develop forms appropriate for Supplemental Submissions.

(b) *Conduct of hearings.* Hearings shall be before the Special Master or his designee. The objective of hearings shall be to permit the claimant to present information or evidence that the claimant believes is necessary to a full understanding of the claim. The claimant may request that the Special Master or his designee review any evidence relevant to the determination of the award, including without limitation: Factors and variables used in calculating economic loss; the identity of the victim's spouse and dependents; the financial needs of the claimant; facts affecting noneconomic loss; and any factual or legal arguments that the claimant contends should affect the award. Claimants shall be entitled to submit any statements or reports in writing. The Special Master or his designee may require authentication of documents, including medical records and reports, and may request and consider information regarding the financial resources and expenses of the victim's family or other material that the Special Master or his designee deems relevant.

(c) *Location and duration of hearings.* The hearings shall, to the extent practicable, be scheduled at times and in locations convenient to the claimant or his or her representative. The hearings shall be limited in length to a time period determined by the Special Master or his designee, but generally not to exceed two hours. The claimant may elect whether the hearing shall be public or private.

(d) *Witnesses, counsel, and experts.* Claimants shall be permitted, but not required, to present witnesses, including expert witnesses. The Special Master or his designee shall be permitted to question witnesses and examine the credentials of experts. The claimant shall be entitled to be represented by an attorney in good standing, but it is not necessary that the claimant be represented by an attorney.

(e) *Waivers.* The Special Master shall have authority and discretion to require any waivers necessary to obtain more individualized information on specific claimants.

(f) *Track A review of presumed award.* For proceedings under Track A, the Special Master or his designee shall make a determination whether:

(1) There was an error in determining the presumptive award, either because the claimant's individual criteria were misapplied or for another reason; or

(2) The claimant presents extraordinary circumstances not adequately addressed by the presumptive award.

(g) *Determination.* The Special Master shall notify the claimant in writing of the final amount of the award, but need not create or provide any written record of the deliberations that resulted in that determination. There shall be no further review or appeal of the Special Master's determination.

### § 104.34 Publication of awards.

In order to assist potential claimants in evaluating their options of either filing a claim with the Special Master or filing a lawsuit in tort, the Special Master reserves the right to publicize the amounts of some or all of the awards, but shall not publish the name of the claimants or victims that received each award. If published, these decisions would be intended by the Special Master as general guides for potential claimants and should not be viewed as precedent binding on the Special Master or his staff.

**§ 104.35 Claims deemed abandoned by claimants.**

The Special Master and his staff will endeavor to evaluate promptly any information submitted by claimants. Nonetheless, it is the responsibility of the claimant to keep the Special Master informed of his or her current address and to respond within the duration of this two-year program to requests for additional information. Claims outstanding at the end of this program because of a claimant's failure to complete his or her filings shall be deemed abandoned.

## Subpart D—Amount of Compensation for Eligible Claimants.

**§ 104.41 Amount of compensation.**

As provided in section 405(b)(1)(B)(ii) of the Act, in determining the amount of compensation to which a claimant is entitled, the Special Master shall take into consideration the harm to the claimant, the facts of the claim, and the individual circumstances of the claimant. The individual circumstances of the claimant may include the financial needs or financial resources of the claimant or the victim's dependents and beneficiaries. As provided in section 405(b)(6) of the Act, the Special Master shall reduce the amount of compensation by the amount of collateral source compensation the claimant (or, in the case of a Personal Representative, the victim's beneficiaries) has received or is entitled to receive as a result of the terrorist-related aircraft crashes of September 11, 2001. In no event shall an award (before collateral source compensation has been deducted) be less than $500,000 in any case brought on behalf of a deceased victim with a spouse or dependent, or $300,000 in any case brought on behalf of a deceased victim who was single with no dependents.

**§ 104.42 Applicable state law.**

The phrase "to the extent recovery for such loss is allowed under applicable state law," as used in the statute's definition of economic loss in section 402(5) of the Act, is interpreted to mean that the Special Master is not permitted to compensate claimants for those categories or types of economic losses that would not be compensable under the law of the state that would be applicable to any tort claims brought by or on behalf of the victim.

**§ 104.43 Determination of presumed economic loss for decedents.**

In reaching presumed determinations for economic loss for Personal Representatives bringing claims on behalf of decedents, the Special Master shall consider sums corresponding to the following:

(a) *Loss of earnings or other benefits related to employment.* The Special Master, as part of the process of reaching a "determination" pursuant to section 405(b) of the Act, shall develop a methodology and publish schedules, tables, or charts that will permit prospective claimants to estimate determinations of loss of earnings or other benefits related to employment based upon individual circumstances of the deceased victim, including: The age of the decedent as of September 11, 2001; the number of dependents who survive the decedent; whether the decedent is survived by a spouse; and the amount and nature of the decedent's income for recent years. The decedent's salary/income in 1998–2000 shall be evaluated in a manner that the Special Master deems appropriate. The Special Master may, if he deems appropriate, take an average of income figures for each of those three years. The Special Master's methodology and schedules, tables, or charts shall yield presumed determinations of loss of earnings or other benefits related to employment for annual incomes up to but not beyond the 98th percentile of individual income in the United States for the year 2000. In cases where the victim was a minor child, the Special Master may assume an average income for the child commensurate with the average income of all wage earners in the United States.

(b) *Medical expense loss.* This loss equals the out-of-pocket medical expenses that were incurred as a result of the physical harm suffered by the victim (i.e., those medical expenses that were not paid for or reimbursed through health insurance). This loss shall be calculated on a case-by-case basis, using documentation and other information submitted by the Personal Representative.

(c) *Replacement services loss.* For decedents who did not have any prior earned income, or who worked only part time outside the home, economic loss may be determined with reference to replacement services and similar measures.

(d) *Loss due to death/burial costs.* This loss shall be calculated on a case-by-case basis, using documentation and other information submitted by the personal representative and includes the out-of-pocket burial costs that were incurred.

(e) *Loss of business or employment opportunities.* Such losses shall be addressed through the procedure outlined above in paragraph (a) of this section.

**§ 104.44 Determination of presumed noneconomic losses for decedents.**

The presumed noneconomic losses for decedents shall be $250,000 plus an additional $50,000 for the spouse and each dependent of the deceased victim. Such presumed losses include a noneconomic component of replacement services loss.

**§ 104.45 Determination of presumed economic loss for claimants who suffered physical harm.**

In reaching presumed determinations for economic loss for claimants who suffered physical harm (but did not die), the Special Master shall consider sums corresponding to the following:

(a) *Loss of earnings or other benefits related to employment.* The Special Master may determine the loss of earnings or other benefits related to employment on a case-by-case basis, using documentation and other information submitted by the claimant, regarding the actual amount of work that the claimant has missed or will miss without compensation. Alternatively, the Special Master may determine the loss of earnings or other benefits related to employment by relying upon the methodology created pursuant to § 104.43(a) and adjusting the loss based upon the extent of the victim's physical harm.

(1) *Disability; in general.* In evaluating claims of disability, the Special Master will, in general, make a determination regarding whether the claimant is capable of performing his or her usual profession in light of the injuries.

(2) *Total permanent disability.* With respect to claims of total permanent disability, the Special Master may accept a determination of disability made by the Social Security Administration as evidence of disability without any further medical evidence or review. The Special Master may also consider determinations of permanent total disability made by other governmental agencies or private insurers in evaluating the claim. The Special Master may require that the claimant submit an evaluation of the claimant's disability and ability to perform his or her occupation prepared by medical experts.

(3) *Partial disability.* With respect to claims of partial disability, the Special Master may consider evidence of the effect of the partial disability on the claimant's ability to perform his or her usual occupation as well as the effect of the partial disability on the claimant's ability to participate in usual daily activities.

(b) *Medical Expense Loss.* This loss equals the out-of-pocket medical

expenses that were incurred as a result of the physical harm suffered by the victim (*i.e.*, those medical expenses that were not paid for or reimbursed through health insurance). In addition, this loss equals future out-of-pocket medical expenses that will be incurred as a result of the physical harm suffered by the victim (*i.e.*, those medical expenses that will not be paid for or reimbursed through health insurance). These losses shall be calculated on a case-by-case basis, using documentation and other information submitted by the claimant.

(c) *Replacement services loss.* For injured claimants who did not have any prior earned income, or who worked only part-time outside the home, economic loss may be determined with reference to replacement services and similar measures.

(d) *Loss of business or employment opportunities.* Such losses shall be addressed through the procedure outlined above in paragraph (a) of this section.

**§ 104.46 Determination of presumed noneconomic losses for claimants who suffered physical harm.**

The Special Master may determine the presumed noneconomic losses for claimants who suffered physical harm (but did not die) by relying upon the noneconomic losses described in § 104.44 and adjusting the losses based upon the extent of the victim's physical harm. Such presumed losses include any noneconomic component of replacement services loss.

**§ 104.47 Collateral sources.**

(a) *Payments that constitute collateral source compensation.* The amount of compensation shall be reduced by all collateral source compensation, including life insurance, pension funds, death benefit programs, and payments by federal, state, or local governments related to the terrorist-related aircraft crashes of September 11, 2001.

(b) *Payments that do not constitute collateral source compensation.* The following payments received by claimants do *not* constitute collateral source compensation:

(1) The value of services or in-kind charitable gifts such as provision of emergency housing, food, or clothing; and

(2) Charitable donations distributed to the beneficiaries of the decedent, to the injured claimant, or to the beneficiaries of the injured claimant by private charitable entities; provided, however, that the Special Master may determine that funds provided to victims or their families through a private charitable entity constitute, in substance, a payment described in paragraph (a) of this section.

## Subpart E—Payment of Claims

**§ 104.51 Payments to eligible individuals.**

Not later than 20 days after the date on which a determination is made by the Special Master regarding the amount of compensation due a claimant under the Fund, the Special Master shall authorize payment to such claimant of the amount determined with respect to the claimant.

**§ 104.52 Distribution of award to decedent's beneficiaries.**

The Personal Representative shall distribute the award in a manner consistent with the law of the decedent's domicile or any applicable rulings made by a court of competent jurisdiction. The Personal Representative shall, before payment is authorized, provide to the Special Master a plan for distribution of any award received from the Fund. Notwithstanding any other provision of these regulations or any other provision of state law, in the event that the Special Master concludes that the Personal Representative's plan for distribution does not appropriately compensate the victim's spouse, children, or other relatives, the Special Master may direct the Personal Representative to distribute all or part of the award be distributed to such spouse, children, or other relatives.

## Subpart F—Limitations

**§ 104.61 Limitation on civil actions.**

(a) *General.* Section 405(c)(3)(B) of the Act provides that upon the submission of a claim under the Fund, the claimant waives the right to file a civil action (or to be a party to an action) in any federal or state court for damages sustained as a result of the terrorist-related aircraft crashes of September 11, 2001, except that this limitation does not apply to civil actions to recover collateral source obligations. The Special Master shall take appropriate steps to inform potential claimants of section 405(c)(3)(B) of the Act.

(b) *Pending actions.* Claimants who have filed a civil action or who are a party to such an action as described in paragraph (a) of this section may not file a claim with the Special Master unless they withdraw from such action not later than March 21, 2002.

**§ 104.62 Time limit on filing claims.**

In accordance with the Act, no claim may be filed under this part after December 22, 2003.

**§ 104.63 Subrogation.**

Compensation under this Fund does not constitute the recovery of tort damages against a third party nor the settlement of a third party action, and the United States shall be subrogated to all potential claims against third party tortfeasors of any victim receiving compensation from the Fund. For that reason, no person or entity having paid other benefits or compensation to or on behalf of a victim shall have any right of recovery, whether through subrogation or otherwise, against the compensation paid by the Fund.

## Subpart G—Measures to Protect the Integrity of the Compensation Program

**§ 104.71 Procedures to prevent and detect fraud.**

(a) *Review of claims.* For the purpose of detecting and preventing the payment of fraudulent claims and for the purpose of assuring accurate and appropriate payments to eligible claimants, the Special Master shall implement procedures to:

(1) Verify, authenticate, and audit claims;

(2) Analyze claim submissions to detect inconsistencies, irregularities, duplication, and multiple claimants; and

(3) Ensure the quality control of claims review procedures.

(b) *Quality control.* The Special Master shall institute periodic quality control audits designed to evaluate the accuracy of submissions and the accuracy of payments, subject to the oversight of the Inspector General of the Department of Justice.

(c) *False or fraudulent claims.* The Special Master shall refer all evidence of false or fraudulent claims to appropriate law enforcement authorities.

Dated: December 19, 2001.

**John Ashcroft,**

*Attorney General.*

**Note:** This Appendix will not appear in the Code of Federal Regulations.

## Appendix to Preamble—Summary of Public Comments Submitted in Response to the November 5, 2001 Notice of Inquiry and Advance Notice of Rulemaking

The following is a summary of the comments the Department of Justice ("the Department") received in response to its Notice of Inquiry published on November 5, 2001. The Notice of Inquiry sought input on numerous issues regarding potential regulations for the "September 11 Victim Compensation Fund of 2001" (the "Fund"), which was signed into law as Title IV of Public Law 107–42 ("Air Transportation

Safety and System Stabilization Act") (the "Act").

Over 800 comments were received by the November 26, 2001 deadline established by the Department. Additionally, hundreds of comments have been received since that date. Every comment was—and continues to be—reviewed, considered, and catalogued into one or more of 72 different topics. While the following summary does not address every issue raised by commenters, it provides a general synopsis of the most often raised issues. The summary is not intended to be an exhaustive illustration of every issue contemplated by the Special Master or the Department. Indeed, as mentioned above, all comments were considered in the promulgation of these interim final rules. Finally, the summarized issues below are not arranged in any particular order of importance or level of volume.

**The Effective Date of This Interim Final Rule**

While the Act specified that this rule should be issued by December 21, 2001, it did not specify when they should become effective. Accordingly, the Department sought comment on this issue. The Department noted that the Administrative Procedure Act generally provides that rules not go into effect for at least 30 days absent "good cause."

Many commenters favored an immediate effective date so that claims could be filed right away. Many indicated an immediate need for relief and expressed frustration about their experiences with obtaining short-term assistance from other sources. However, some commenters thought an immediate effective date would be difficult to implement because the Special Master would need time to hire personnel and to set up the operation of the program before beginning to process claims.

A number of commenters suggested a compromise—making available some amount of short-term relief on an immediate basis to eligible claimants, and then commencing the more detailed review process necessary to provide a final award. Some suggested using flat amounts for these immediate awards, while another commenter suggested establishing an interest-free line of credit upon which families could draw. Another suggestion was that claims for immediate assistance be prioritized by "need."

**Eligibility**

In its November 5, 2001, Notice of Inquiry, the Department noted that section 405(b) of the statute requires the Special Master to determine whether a claimant is an "eligible individual" under section 405(c). "Eligibility," in turn, is defined by the Act to include: (1) individuals (other than the terrorists) aboard American Airlines flights 11 and 77 and United Airlines flights 93 and 175; or (2) individuals who were "present at" the World Trade Center, the Pentagon, or the site of the aircraft crash at Shanksville, Pennsylvania at the time or in the immediate aftermath of the crashes; or (3) personal representatives of deceased individuals who would otherwise be eligible. Moreover, to be eligible for an award, an individual must have suffered physical harm or death as a result of one of the terrorist-related air crashes. The Department sought comment on whether a Departmental regulation or a statement of policy by the Special Master would be appropriate to clarify these criteria, and if so, what those criteria should be.

The Department specifically invited comment on the following questions related to eligibility:

- How should "present at" be interpreted?
- Should the term "physical harm" be limited to serious injuries, as it is under some other no-fault compensation schemes, (see, e.g., N.Y. Ins. Law § 5102), or should it be construed more broadly?
- Should "physical harm" be limited to currently identifiable injuries?
- Can and should the program address latent, but not yet evident, harm?
- What duration of time is intended by the statutory phrase "immediate aftermath"?

*(1) "Present At" And "Immediate Aftermath"*

Many of the comments addressed the question of how to define the terms "present at the site" and "immediate aftermath," especially for purposes of those who were in New York at the time of the crashes. Some commenters urged a broad definition of these terms. They recommended that anybody in New York City be considered "present" because the debris and ash from the collapse of the World Trade Towers was widespread. Residents who live near the Ground Zero site in New York urged that they be eligible to recover under the Fund.

In contrast, other commenters argued for a narrower definition of the terms, asserting that the legislation intended to constrain the Fund to the locus of the buildings themselves, and to some very limited time period after the crashes. One comment recommended that "immediate aftermath" be defined as 48 hours after the crashes.

*(2) Physical Harm*

With respect to the nature of harm involved, some commenters asserted there should be no lower boundary for "nonserious" injuries. Of those who commented on the point, there were disagreements as to whether post-traumatic stress could be considered physical harm for purposes of filing a claim under the Fund. Certain commenters indicated that many people suffered substantial stress from witnessing the attacks and devastation and that they should be eligible to recover from the Fund. However, others argued that the Fund was not intended to cover psychological injury because the language of the statute specifically requires that the claimant suffer "physical harm." These commenters feared that recovery for stress-related injuries would open a Pandora's Box of less serious claims, which, in turn, may reduce the amount of compensation issued to those with the most serious physical injuries.

*(3) Latent Harm*

Some of the comments focused on the problem of latent injuries and diseases. Several commenters mentioned the coughing they have experienced as a result of exposure to the crash site in New York, and some nearby residents expressed concern about latent harm that might accrue from returning to their homes before the conclusion of the rescue and cleanup efforts. On the other hand, other commenters expressed concern about covering any harms that do not manifest themselves within the two-year lifetime of the Fund. They argued the Fund was not designed to compensate for latent harm primarily because the Fund only exists for two years, and many injuries may not become manifest until after that time.

*(4) Eligibility of Victims And Survivors*

Some commenters addressed the meaning of the word "victim." For example, some commenters urged that any unborn child who died should be considered eligible for an award as a victim. With respect to a different group of potential claimants, some commenters argued that illegal aliens should not be eligible for awards. However, other commenters did not think that legal status should preclude an award from the Fund.

With regard to claims on behalf of decedent victims, the comments evidenced a tremendous amount of confusion about whether the statute intended to cover only the losses incurred by the victim or the losses incurred by relatives and others. Some commenters noted that section 405 of the Act provides that only claims on behalf of the victim can be filed with the Fund, presumably leaving to the courts any claims by family members or partners on their own behalf. However, some commenters noted that section 403 of the Act states that its purpose is to provide compensation to any individual "or relatives of a deceased individual" who were killed as a result of the terrorist-related aircraft crashes. The commenters further noted that various types of losses that may be compensated by the Fund pursuant to section 402 are akin to those that in civil actions are normally considered losses to survivors rather than to the victim.

Many commenters commented on the "eligibility" of particular "survivors" of the victim. Some suggested that only a spouse and children be considered "eligible." Others expressed concern as to whether parents, divorced spouses, children of a prior marriage, and others with a legal relationship would be "eligible" for an award under the Fund. In this regard, a number of comments specifically urged that non-married partners and others with a non-traditional relationship be considered "eligible" for an award. Some commenters opposed the idea of extending eligibility under the Fund to those in non-traditional relationships and argued for a narrower definition of eligibility.

Similarly, there were a number of comments about how "eligible" survivors would participate in the decision of whether to submit an application to the Fund, since in their view the application to the Fund would prohibit all of them from filing civil litigation. Some commenters explicitly suggested the law be interpreted to allow claims both on behalf of the decedent's estate and on behalf of any survivors, and suggested that such claims could be consolidated for decision before the Special Master. Others, however, specifically recommended that claims be limited to those on behalf of the estate. Many commenters, presuming that to

be the case, recommended that the state courts be responsible for designating the representative to represent the estate, and that any award be distributed in accordance with the requirements of the will or state intestacy law.

**Assistance to Claimants**

In its Notice of Inquiry of November 9, 2001, the Department noted that it would appear that these requirements—combined with the statutory time frame for the Special Master to reach a decision once a claim is filed—contemplate a detailed form and filing. Accordingly, the Department invited comments on whether there are actions the Special Master should be required to take before he can accept a claim, or deem a claim "filed." The Department noted that the statute appeared to provide a very limited time frame for the Special Master to evaluate a claim before making a decision—120 days from the date a claim is filed. Accordingly, the Department sought comment on whether the Special Master should be permitted to dismiss a claim as not properly filed for lack of adequate supporting information and, if so, whether an individual should thereafter be permitted to refile the claim. Comments were also solicited on whether it would be advisable to include in the rules a procedure where the time for making a determination could be extended by agreement.

The Department also requested comment on the design and content of the claim forms in light of the statutory requirements, as well as on making the forms and their instructions readable and readily available. The Department also sought comment on how it should implement the statutory requirement that claimants be provided with assistance.

While most of those who commented supported maintaining firm deadlines, many commenters suggested that a claimant be able to "halt the clock" at the claimant's discretion for various purposes (e.g., to provide further evidence before the claim is evaluated, to allow more time to prepare for a hearing, or to allow for an administrative review of an initial award determination). Some suggested that the Special Master also have the authority not to start the clock until the claim contained sufficient information upon which an award determination could be made, or to halt the process for a set period of time to allow for review of an initial determination (provided that the claimant concurred with that decision).

A number of commenters stressed that a claimant should not lose the right to proceed with their claim due to an incomplete file. One commenter suggested the Special Master should have 14 days to review a claim before deciding if there is enough information to proceed. Several commenters suggested that claimants not be required to waive their right to litigation until it was determined the claimant was eligible to recover from the Fund. Similarly, some commenters stated they would have difficulty deciding whether or not to opt into the fund (and thus waive their right to sue) if they did not have some idea or presumption of the range of recovery they might expect from the Fund.

Many commenters urged the Department to establish a simplified procedure for initiating a claim with the Fund. They expressed frustration with the barrage of paperwork required to apply for assistance with other organizations. Some employers offered to provide information on behalf of their employees or survivors in an effort to reduce the paperwork burden on claimants. On the other hand, some noted that—in light of the pro bono legal assistance that has been offered to the survivors—claimants would have the option to have the assistance of an attorney to complete the forms. A number of commenters suggested a two-step claims process that would involve a simple initial submission, followed by a more assertive effort to collect additional information with the guidance of claimant assistance personnel from the Office of the Special Master.

A number of commenters had suggestions as to how the Special Master might assist claimants both in filing claims and completing the claims process. Many suggested that local offices be established in New York City, Washington DC, Pennsylvania, and other cities that served as the domicile of victims. Some urged that outreach efforts be made to locate potential claimants and make them aware of the program's operations. Some mentioned that outreach should include multi-lingual assistance and publications. One group suggested that each Hearing Office have an Applicant's Assistant. Others suggested the Special Master hire victim advocates to assist claimants throughout the process.

**The Claims Evaluation Process**

The Department solicited comment on whether every claimant should be granted an oral hearing or whether paper hearings may be sufficient, and what types of oral hearing might be practicable in light of the statutory time frames.

Further, the Department sought comment on how evidence might be established and whether it is authorized to enforce requests made by the hearing officer to third parties for evidence that is necessary to a proceeding (e.g., evidence that might bear on whether all aspects of the claim file on which the decision will be based are accurate and complete). The Department sought comment on whether such proceedings should be recorded, whether such proceedings should be held in a location convenient to the claimant, how to deal with scheduling conflicts, and whether the opportunity for a hearing can be waived by a claimant through inaction or unwarranted delay.

Many commenters had opposing views on the role hearings should play in claims evaluation. Some commenters—comparing this program to civil litigation—viewed the hearings as essential to each and every claim. These commenters recommended hearings as a sort of "mini-trial," which would include rules of evidence (albeit relaxed rules) and adversarial questioning of witnesses. Using the same analogy, however, these commenters suggested that many claims could be "settled" based on only the paper submissions. Other comments suggested the hearings be more akin to an opportunity—for those claimants who want to exercise it—to make an informal oral presentation of their cases. They viewed the hearing as an opportunity to ensure that the decision maker was aware of their individual circumstances. Many of these commenters also suggested, for various reasons, that not all claimants would want a hearing. Some commenters suggested allowing claimants, upon filing a claim, to elect among different "tracks"—one that would involve a hearing, and one that would not.

On the question of who should be hired as hearing officers, suggestions included retired trust executives, retired judges, attorneys experienced in handling high volume caseloads, and those experienced in civil litigation. Some commenters recommended there be a panel of hearing officers rather than one hearing officer. A number of commenters also recommended that claimants have the opportunity for review of their award to ensure that the decision maker was aware of their individual circumstances.

Many commenters submitted detailed procedural suggestions for the claims process. Among other things, these suggestions dealt with how eligibility and damages could be established through the use of affidavits under penalty of perjury in the event relevant documents had been lost as a result of the crashes themselves (e.g., designations of beneficiaries maintained by employers). Additionally, a number of commenters suggested the Special Master have the right to subpoena evidence required to make a determination.

**Awards Under the Fund**

*(1) Meeting the 120-Day Deadline*

The Department invited comment on what means and mechanisms could be implemented to allow just compensation within the statutorily-mandated 120-day period for processing claims. In particular, the Department sought input on whether and how statistical methodologies should be developed and used as a starting point for decision, and whether publication of hypothetical or presumptive awards for classes of individuals would assist potential claimants in determining whether to opt into the Fund. For the most part, these comments were encapsulated in discussions regarding the calculation of damages; namely, economic and noneconomic losses.

*(2) Calculating "Economic Losses"*

The Department sought specific comment on how the Special Master should determine "economic losses." Although retaining experts is certainly not prohibited, the Special Master will not require any claimant to obtain legal counsel or other experts to assist in proving or presenting evidence of damages. The Special Master may, however, draw on available information from appropriate specialists in relevant fields to analyze economic losses. The Department invited comment regarding the necessary qualifications for such specialists, the data that should be utilized, the methodologies that should be employed, the documentation that should be required for every claimant, and how state law should bear upon such determinations. In addition, the Department invited comments on how to address the economic losses of individuals whose lost

future income streams would have been highly contingent, variable, or unpredictable.

As expected, the range of comments on how best to calculate economic losses was widely varied. One group suggested a minimum value be calculated based on median income and remaining years of work, with flexibility to adjust the award after hearing all the evidence in individual cases. Similarly, certain comments suggested the use of a grid would be appropriate in certain circumstances to identify presumed awards. Others urged that no type of grid be used.

In terms of presumptive valuation, a few commenters recommended that awards mirror the amount a party could anticipate receiving from personal injury or wrongful death actions. Others disagreed. Many recognized the limited opportunities now available to potential plaintiffs filing claims in civil courts arising out of the September 11, 2001 terrorist attacks. At least one commenter argued that the fairest approach in determining economic losses is that which insurance companies use in settling claims.

Some commenters indicated that economic awards should not be based on differences in individual income prior to the crash. Some suggested using a flat dollar figure per surviving family member (e.g., $250,000 for each survivor). Another suggested a flat amount for death at $100,000, injury at $50,000, and various other losses at stated dollar figures. On the other hand, some commenters felt the purpose of the program is to act as a substitute for civil damage actions, and that efforts should be made to determine and take into consideration the amount of income likely lost by a decedent. A large number of comments were received with respect to how to establish such income (e.g., average over a certain number of prior years, plus information supplied by employers on future prospects).

*(3) Calculating "Noneconomic Losses"*

The Department also sought comment as to "noneconomic losses." Most notably, the Department invited comments regarding whether, and in what manner, the Special Master can or should draw meaningful distinctions between both those victims who died in different locations and those who suffered similar injuries. The Department also invited comments on whether the Department should (as some have suggested) issue regulations determining the amount of noneconomic loss for classes of similarly situated individuals or whether, instead, the Special Master should determine all noneconomic loss on a detailed claim-by-claim basis. Further, the Department requested comment on what facts and circumstances should be considered in determining noneconomic losses for each individual, and what standards should be employed.

Comments regarding noneconomic losses were similarly varied. One commenting association suggested noneconomic losses—such as pain and suffering—should be standardized because such losses do not vary by income strata. Numerous commenters advocated a "fixed" noneconomic award, stating that the government should not attempt to draw distinctions in the amount of pain suffered by victims or their survivors. One commenter suggested the most equitable process for determining noneconomic awards would be an elective process. Under this proposed method, a claimant could elect to have the award calculated by use of a matrix, or alternatively, could present evidence at a hearing to establish the amount to which the claimant believes he or she is entitled. A number of commenters argued that the statute necessitated an entirely individualized determination of noneconomic losses in every case. A group representing survivors of decedents suggested that noneconomic losses must be uncapped and based, in part, on the number and age of any surviving children or dependents, the current and future pain and suffering experienced by the victim's family, and the severity of pain suffered by the victim himself or herself.

*(4) Taxation*

A number of commenters raised questions about the taxability of various kinds of awards issued under the Fund. Several commenters asserted that compensation from the Fund should be nontaxable under federal law, similar to various types of tort awards. Another commenter stated that state victim compensation fund awards generally are not taxable, either by the state or the federal government. On the other hand, another commenter stated he did not see the purpose of distributing taxpayers' money to victims, and urged taxing the awards so as to return some of the money to the Treasury.

**Collateral Sources**

The Department sought comments on the issue of collateral sources. Although the Act requires that collateral sources be deducted from awards issued under the Fund (and explicitly outlines examples of certain types of collateral sources), the Department invited comment as to how the term "collateral source" should be defined.

*(1) General Comments*

Despite the explicit language in the Act, a number of commenters took issue with deducting any collateral sources whatsoever. Although many recognized that both the Department and the Special Master are bound to follow the language in the Act, they nonetheless argued that collateral sources are—in many states—not offset in wrongful death suits. Some urged that the type of collateral source offsets should be interpreted narrowly. A number of commenters also suggested that if collateral source benefits to a victim are to be offset, a counter-offset should be made for the premiums or contributions made by the victim to purchase various benefits. Others specifically suggested that only the value of collateral benefits funded by a victim's employer should be offset.

Many commenters, however, asserted that the program should not "unjustly enrich" the victims or their survivors, and supported the use of widespread offsets. Some of these comments mentioned that—although the statute does not provide either a ceiling or floor for the amount of awards—the Fund may have only a limited pool of resources to distribute to claimants (akin to the funds being collected and distributed by charitable organizations), and suggested the need to help those most in need. Other comments noted that unjust enrichment should not flow through tax-payer dollars. It was mentioned that many taxpayers—who ultimately will provide the funds under the program—also sent in charitable contributions not to unjustly enrich victims or their families, but, rather, solely to help them through these troubled times.

*(2) "A claimant has received or is entitled to receive"*

Some commenters specifically focused on the word "claimant" in the phrase "a claimant has received or is entitled to receive," and urged that any collateral source benefits not paid or to be paid directly to the claimant not be deducted from the award. These comments were often parallel to those concerning the question of whose losses are to be compensated under the Fund: only those of the decedent (estate), or those of others as well. (See the discussion of Eligibility.)

A number of comments also focused on the words "entitled to receive." Some recommended that only those collateral benefits scheduled to be paid as a result of contractual or other clear obligations should be deducted from an award. Others recommended that only the present value of any future contingent awards be considered in making any offset.

*(3) Life Insurance*

Many commenters were frustrated that the Act requires life insurance proceeds to be deducted from awards. Many asserted that deducting life insurance will penalize those who planned ahead. One suggested that life insurance should only be offset if payable to a dependent of the victim, and another group of commenters indicated that only the sums received by the eligible applicant net of all taxes that exceed the premiums—or other payments made by the applicant—be deducted. A number suggested that if life insurance is to be offset, the premiums paid should be returned to the victim by reducing the amount of the benefit offset.

*(4) Pensions*

While similar concerns (as to life insurance) were raised in connection with pensions, a more common comment concerned the meaning of the term "pension." For example, some commenters noted that pensions are not normally considered to be "compensation for a loss" but are instead akin to savings.

*(5) Workers Compensation And Victim Assistance Programs*

One commenter pointed out that most of the victims may be eligible for workers' compensation benefits because they were killed while on the job. Further, with respect to those receiving benefits under New York law, the compensation insurer can terminate workers' compensation payments—absent claimants obtaining consent to enter the Fund—if benefits are being paid to the injured workers or survivors. New York State legal authorities confirmed the noteworthiness of this issue, and

recommended that workers' compensation payments not be considered a collateral source to this extent.

With respect to state victim assistance funds, one commenter noted that 42 U.S.C. 10602(e)—which generally provides that state crime victim boards may refuse to pay out benefits if another Federal program is paying benefits—was explicitly amended to exclude payments made under the September 11th Victim Compensation Fund of 2001. The commenter suggested that some programs covered under that code provision—that have already made payments—may be entitled to reimbursement as a result.

*(6) Charitable Contributions*

Many victims of the terrorist-related crashes on September 11, 2001, have or may receive support from special funds set up to assist them, as well as from special programs established by some of their employers to share future profits and the like. Accordingly, whether to reduce Fund awards by the amount of such contributions was one of the issues given the most attention in the comments. Notably, this issue was discussed in a number of news articles at about the time the Notice of Inquiry was issued.

Commenters were heavily divided on this issue. Many were strongly opposed to reducing awards by the amount of charity funding received. This includes some commenters who donated to charities established for this purpose, as well as employers who established funds to help the families of the victims. Many insisted that funds collected by employers solely for the purpose of compensating victims of the September 11 attacks should not be deemed a collateral source. Many drew a distinction between funds provided for short-term assistance and need, and those designed to compensate victims for their losses.

On the other hand, a number of comments from those who contributed money to various charities viewed the purposes of the charities and the Fund as one and the same; namely, compensating the victims. These commenters asserted they had not intended making contributions to unjustly enrich the families, and would hesitate to make such contributions in the future if their help turns out only to ensure persons maintain a certain lifestyle.

A number of commenters also pointed to the practical difficulties of trying to establish what claimants may have received from charities. Some suggested the Fund should have access to any database of charitable contributions, including one that was reported to be under consideration in New York.

After discussing these factors, some commenters suggested that the Special Master only offset charitable contributions over a certain amount. A few commenters suggested only offsetting charities set up for longer term assistance to the victims (e.g., tuition funds or scholarships for the children of all the victims).

**Payment of Awards**

Some commenters expressed the view that payments by the fund should be in the form of "structured settlements" or annuities rather than in lump sum. One commenter suggested payments to children should go to a trustee for the benefit of the child. However, other commenters argued for lump sum payments and objected to the government placing any restrictions on the claimants' award.

**Limitations on Fees for Assistance And Payment by the Special Master**

The Department requested comments on whether the Special Master has the authority to limit the types and amounts of fees that can be charged by counsel, accountants, experts or others who are retained by claimants to assist them to file and pursue compensation claims, and whether such fees can and should be paid by the Special Master directly out of compensation awards. The Department also solicited comments on what limitations, if any, the rules should impose on non-attorney, non-claimant representatives' participation in filing claims.

A number of commenters noted that the right to be represented by counsel is provided by the statute, that not all claimants would be comfortable using pro-bono counsel to represent their interests, and that payment of attorneys' fees is necessary to ensure representation by counsel of choice. Some of these commenters suggested, however, that fees could be limited so as not to exceed 10% of the award to claimant. Paradoxically, some commenters opposed using any amount of money from the Fund to pay legal fees.

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**Comments on Proposed Rule-Making: North Section**

N002319

Tuesday, January 22, 2002 5:57 PM
Comments from NOW Legal Defense and Education Fund, New York, NY

By Facsimile And E-Mail

January 22, 2002
Kenneth L. Zwick, Director
Office of Management Programs
Civil Division
U.S. Department of Justice
Main Building, Room 3140
950 Pennsylvania Avenue
Washington, DC 20530

Re: September 11 Victim Compensation Fund of 2001

Dear Mr. Zwick:

The September 11th Victim Compensation Fund ("Fund") 1 represents the commitment of all Americans to aid the victims of that terrible day as fully, and as fairly, as possible.2 NOW Legal Defense and Education Fund is a leading national non-profit civil rights organization that performs a broad range of legal and educational services to define and defend women's rights. We are based in lower Manhattan, and our staff has been deeply affected by the attack on our city and our nation that day. We offer these comments in the same spirit of compassion with which the Special Master attempts to help the victims of this tragedy, and with the hope of ensuring that the Fund represents America's most cherished values, including the equality of all persons before the law.

Many of the victims of the September 11th attacks were women, the majority of whom worked full time. Many of these women were also members of racial and ethnic minority groups, as were large numbers of the tragedy's male victims. We are concerned that the Interim Final Rule setting forth federal regulations to implement the Fund may discriminate against and threaten the constitutional rights of the victims of the terrorist attacks, through the Fund's anticipated use of gender- and race-based data to determine compensation.3 This practice, we believe, threatens the constitutional rights of women and minorities, spinning into the future a history of state and private discrimination against these groups.

Troublingly, the anticipated use of such gender- and race-based data has not been disclosed by the government in the Rule itself or in any of the explanatory materials provided to potential claimants and the public to date (see infra). This seriously undermines the government's effort to ensure that potential claimants can make "informed decisions regarding whether to file claims with the Fund."

Further, we believe that the Rule undervalues women victims' contributions to their families and society. Whether or not they are employed full time, women in America perform the lion's share of essential, unpaid services including care-giving and household work. Such work is typically

compensated under tort law, yet the Fund's approach fails to capture the significant value of this labor.

The Fund's Anticipated Reliance On Gender- And Race-Based Data To Determine Compensation Threatens The 9-11 Victims' Constitutional Right To Equal Protection.

Given the interest all Americans have in ensuring that the compensation process treat victims equally and fairly at every stage, we urge the Special Master not to use gender and race as factors in calculating compensation, whether to estimate victims' worklife and future earning capacity, or for other purposes. As discussed further below, we are extremely concerned that the public and potential claimants do not understand that the Fund may consider the victims' gender and race in establishing awards, and indeed, may have been misled into believing that only factors of age, marital status, past income and number of dependents would be relevant.

The stubbornly persistent wage gap between men and women, and between whites and racial and ethnic minorities,5 derives from a long history of government and private discrimination which has favored male and white workers. In large part due to the commitment of the U.S. government to eradicating discrimination and combatting this legacy,6 women and minorities enter the workforce today with the hope that their careers will not be clouded by past or present biases against them, and that they can pursue every opportunity available to all Americans. Courts have rejected and legal scholars have questioned the use of gender- and race- based data to determine damages, because their use is inherently unfair to women and minorities.
When the government itself chooses to use such data, we must consider not just the unfairness to individuals but the threat of serious constitutional violations.8 Specifically, we believe that the Fund's anticipated reliance on gender-specific and race-specific data not only perpetuates discrimination against women and minorities, but will violate the September 11th victims' equal protection right under the Fifth Amendment. See U.S. Const. amend. V ("No person shall . . . be deprived of life, liberty, or property, without due process of law."). Victims' rights may also be violated under state constitutional guarantees of equal protection. In the states in which large numbers of potential claimants reside, separate equal protection guarantees exist; in some cases these are more protective than the federal constitution.9 Some of these states have equal rights amendments, which offer additional constitutional protection against gender-based violations of equal protection.10 Some also have constitutional guarantees of "open access" to the courts: denial of full compensation for injuries on the basis of race or gender may violate these "remedies clauses."

Classifying victims of the September 11 tragedy by their gender and race for the purpose of determining compensation is an invalid use by the government of suspect classifications that will not withstand constitutional scrutiny. As a threshold matter, the Fund's reliance on gender and race would undoubtedly constitute state action, bringing it within the reach of the Equal Protection Clause. Congress established the Fund "to provide federal money to victims and their families," in return for which the claimants must give up their right to sue airlines and other entities.12 The Department of Justice oversees administration of the Fund, including development of and implementation of procedures to determine claimants' eligibility and compensation.13 All aspects of the Fund's conception and implementation are thus clearly conduct attributable to the federal government and reached by the Equal Protection Clause.

Under equal protection analysis, the government must justify its decision to classify the victims and claimants by their gender and race. There has been for decades a strong presumption in American law that gender classifications favoring men or women are invalid. U.S. v. Virginia ("VMI"), 518 U.S.

515, 541-42 (1996); J.E.B. v. Alabama ex rel. T.B., 511 U.S. 127 (1994). It is the government's burden to show that its justification for gender classifications is "exceedingly persuasive." VMI, 518 U.S. at 531 (state institution's male-only admissions policy invalidated where government failed to show "exceedingly persuasive justification" for gender-based classification). The gender-based worklife tables are predicated upon data that captures and continues a long history of discrimination against women, often based upon stereotypes about women's abilities and preferences. See, e.g., Miss. Univ. for Women v. Hogan, 458 U.S. 718, 730 (1982) (government's gender-classification reflected and perpetuated stereotypes about the sexes' labor force participation). In using this data, the government will rely on "overbroad generalizations about the different talents, capacities, or preferences of males and females."14 This will result in many women victims and their survivors receiving lower compensation than identically situated men, and will therefore "perpetuate the legal, social, and economic inferiority of women."

Title VII, too, has been used to strike down the use of gender-based actuarial data as discriminatory against women.16 Thus the Supreme Court explained in Manhart that "in forbidding employers to discriminate against individuals because of their sex, Congress intended to strike at the entire spectrum of disparate treatment of men and women resulting from sex stereotypes . . . [federal anti-discrimination law] subjects to scrutiny and eliminates such irrational impediments to job opportunities and enjoyment which have plagued women in the past."17 And in Norris, the Court reiterated that sex-based classification of employees based on actuarial assumptions about longevity violated Title VII as "flatly inconsistent" with the federal law's requirement that "employers . . . treat their employees as individuals, not 'as simply components of a racial, religious, sexual, or national class.'"

In this light, it is highly unlikely that any plausible governmental objective in using gender-based information--such as efficiency or accuracy--will be "exceedingly persuasive."19 This is especially so when the Special Master has indicated that one major Fund goal is to treat claimants fairly based on their individual and unique circumstances. Rule, at page 66274 (Fund goal to provide "just and appropriate" compensation "in light of "individual circumstances" analyzed beyond any "theoretically possible future income stream"). Compensating similarly situated claimants differently solely on the basis of their gender ignores the victims' "individual circumstances" in favor of projections of expected future earnings based in part on historic prejudices. This is especially unjust and ironic at a time when the United States' role in advancing the equality of women both here and abroad remains so urgent.

The equal protection argument against the Fund's use of race-based tables runs along similar lines, and is arguably even stronger. Under federal constitutional jurisprudence, race is a "suspect classification," reviewed under "strict scrutiny": a test that is very seldom met. See, e.g., Adarand Constructors, Inc. v. Pena, 515 U.S. 200, 235 (1995) (strict scrutiny test applies to determine whether race-based classifications violate equal protection) ("Federal racial classifications . . . must serve a compelling governmental interest, and must be narrowly tailored to further that interest").

By guaranteeing equal protection to persons of all races and ethnicities, the Constitution recognizes that "[r]acial and ethnic distinctions of any sort are inherently suspect and thus call for the most exacting judicial examination." Regents of Univ. of Cal. v. Bakke, 438 U.S. 265, 291 (1978) (opinion of Powell, J.). See also Hirabayashi v. United States, 320 U.S. 81, 100 (1943) ("distinctions between citizens solely because of their ancestry are by their very nature odious to a free people whose institutions are founded upon the doctrine of equality."). The Supreme Court makes little allowance even for "benign" racial classifications which are designed to remedy past discrimination, see Adarand, 515 U.S. at 227; City of Richmond v. J.A. Croson Co., 488 U.S. 469

(1989) (minority set asides invalid under strict scrutiny because city failed to show narrowly tailored fit between compelling government interest and program).

Far from being benign, the use of race-based data will penalize victims of September 11 and perpetuate a history of government-sponsored and private bias against racial minorities. Moreover, in an increasingly racially and ethnically diverse society, efforts at categorizing the thousands of victims accurately and fairly on the basis of perceived racial and ethnic group membership is likely to be both inaccurate and unmanageably complex.

The Fund may suggest that its objectives in using race-based tables are greater efficiency or accuracy. However, this is not likely to be a "compelling" governmental objective supporting racial classifications where the task of ascribing racial and ethnic identities to the victims is likely to be complex and inaccurate. In any case, the goal of efficiency and accuracy can be well-met by the Fund's consideration of non-suspect classifications, such as age, income history, and marital status, which experts have long relied upon to assess projected future earnings. The Special Master's hearings will give the government ample opportunity to consider claimants' "individual circumstances" and award fair compensation without resorting to gross, overbroad generalizations about race which seem likely to violate the constitutional guarantee of equal protection.

The Fund Has Misled The Victims And The Public About Its Planned Reliance On Gender And Race.

The Special Master's Office has, under questioning from attorneys, journalists, and experts in the field of tort compensation, acknowledged that claims may be assessed based in part on the gender and race of the victim.21 Unfortunately, the government has not been candid about this possibility with potential claimants, or the American people.
We are not aware of any part of the Rule or other materials made available to the public in which the Special Master or Department of Justice acknowledged that the government anticipates using the victims' gender and race to determine compensation.22 To the contrary, the Rule and other information have been quite misleading on this point. For example, the Rule states that the methodology will be based on the claimants' "readily identifiable" traits, and names among these the claimants' "age, prior income levels, marital status, and the number and ages of the victim's dependents."23 No mention is made of gender or race. Similarly, the Presumed Loss Calculation Tables Before any Collateral Offsets Chart ("Chart"), which potential claimants are invited to consult to estimate their compensation, appears to aggregate gender-based and race-based information.24 Persons consulting the Chart will find the same list of relevant "traits" mentioned in the Rule: age, marital status, income and number of children of the victim, but the Chart makes no mention of the potential relevance of the victim's gender or race. Indeed, the Chart's prefatory language strongly --and misleadingly-- implies that women and men will be treated alike, by stating that the calculation of compensation "assumes that each person would have worked a number of years equal to the average expected worklife across the nation for males and females of the same age as the victim." See Chart, page 2.25

Because of the lack of clarity and candor from the government on this important issue, we are concerned that potential claimants remain unaware that the gender and race of the September 11 victims threatens to reduce the compensation available for women and members of racial minorities and violate their constitutional rights.

The Fund Will Discriminate Against Women Victims In Its Valuation Of Unpaid Services.

According to the Rule, presumed economic loss for victims does not take into consideration the true economic value of household services performed by the victims of the September 11th tragedy. The unpaid household services at stake may include such tasks as housecleaning, cooking, car-pooling and lawn-mowing; compensation for unpaid services must include care-giving, such as assisting children with school work or helping an older relative, as well. The Rule compensates claimants with a lump sum for non-economic components of "replacement services loss."26 As it relates to the valuation of economic losses, however, the Rule only compensates replacement services for those victims who had no prior earnings or worked only part time outside the home.27 Yet full time workers, too, perform valuable household services, and failure to fully compensate those services will fall hardest on women victims and their survivors, because working women typically perform a greater amount of these services than men.

It is accepted practice for courts in New York and beyond to compensate victims, including those who work full-time, for the value of replacement services for their household work.28 Moreover, Congress contemplated economic losses to be construed by the Fund with reference to state law.29 In New York State wrongful death actions, for example, plaintiffs may recover all "fair and just compensation for the pecuniary injuries resulting from the decedent's death."30 New York courts have interpreted "pecuniary injuries"--or economic losses-- to include the loss of household services, and have not carved out an exception for full time workers.31 The federal courts have also recognized that the loss of a working woman's household services are recoverable, economic losses.

While under-compensating all full time workers, we are especially concerned that the Rule's calculations will have a disproportionately negative impact on women victims, because women continue to perform more household services than men, though each case must be viewed individually. Thus, one study has shown that married women working full time with children under the age of 18 perform approximately 35.6 hours of household services per week, as compared to 26.9 hours performed by men.33 Therefore, women victims and their survivors are likely to be disproportionately harmed by the Rule's treatment of economic losses. By ignoring the extent and worth of unpaid, household services performed by victims who worked full time when calculating economic losses, the Fund fails to capture value of these "second shift" contributions.

Conclusion

We appreciate the enormity of the task facing the Special Master, especially as emotions about the process run high. The terrorist attacks on September 11th were not simply "torts" and the September 11 Victim Compensation Fund is not merely a fund to compensate victims of the tragedy. Even in this climate of pitched emotions, basic principles of fairness - some of which are constitutional in scope - must be honored in administering the Fund. Ignoring these principles threatens the rights of women and minorities, and perpetuates the long history of government and private discrimination against these groups.

Sincerely yours,

Comment by:
NOW Legal Defense and Education Fund

New York, NY

Comments on Proposed Rule-Making: South Section

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N002676

NAACP LEGAL DEFENSE AND EDUCATIONAL FUND, INC.

January 22, 2002

Mr. Kenneth L. Zwick
Director
Office of Management Programs, Civil Division
U.S. Department of Justice
Main Building, Room 3140
Washington, D.C. 20530

Re: September 11 Victim Compensation Fund of 2001

Dear Mr. Zwick:

The NAACP Legal Defense and Educational Fund, Inc. ("LDF") is a non-profit corporation established under the law of the State of New York. It was formed to assist black persons in securing their constitutional rights through the prosecution of lawsuits and to provide legal services to those suffering injustice by reason of racial discrimination. LDF's first Director-Counsel was Justice Thurgood Marshall. For six decades, LDF attorneys have represented parties in litigation in federal and state courts, including the seminal case of Brown v. Board of Education, 347 U.S. 483 (1954).

We urge you to consider carefully the detailed analysis submitted to you on this date by the NOW Legal Defense and Education Fund but write separately to express our deep concerns regarding published reports that the Special Master of the September 11 Victim Compensation Fund, through implementation of the Interim Final Rules, intends to use life expectancy tables[1] that discriminate against minority and female victims of the September 11 terrorist attacks. It is simply incomprehensible to us that an agency of the United States government would sanction the use of race-based and gender-based calculations to disadvantage people of color and women in the determination of compensation to victims.

Published reports indicate that the Special Master intends to use the separate "work life expectancy" tables to generated by the Bureau of Labor Standards from 1979-80 data[2]. By using these tables (and any other race or gender-based tables) the federal government endorses the concept that minority and female victims of the attack, had they lived, would have faced the same discrimination in the workplace and elsewhere as existed in this country during the last fifty years. The 1979-80 data, if it is to be used, will inevitably reflect the effects of racial discrimination in this country. This is utterly at odds with the federal government's commitment to end race and gender discrimination. Use of race and gender-based classifications in this context is also unconstitutional.

The federal government has, for the past fifty years, treated the struggle to end invidious discrimination on the basis of race and gender as among its highest priorities. Pursuant to the statutory prohibitions against discrimination contained in the Civil Rights Act of 1964, the United

States Supreme Court struck down as unlawful the use of gender-based annuity tables in Los Angeles Dept. of Water and Power v. Manhart, 435 U.S. 702 (1978). The Supreme Court has, only recently concluded that even "benign" classifications designed to remove the effects of this Nation's history of racial discrimination are subject to strict scrutiny. Adarand Constructors v. Pena, 515 U.S. 200 (1995). There is no compelling national interest in calculating the value of an African-American life, or a woman's life, at an amount lower than that of their white or male contemporaries. Race-neutral means for making those calculations exist and should be used. The Constitution requires nothing less.

We ask the Special Master to disavow publicly and forcefully the use of race-based and gender-based tables for any purpose connected with the administration of the Fund. The Special Master should also publish a detailed explanation of how award calculations will be made and what data sources will be used. The public should be given an opportunity for comment.

The use of race and gender-based tables to calculate compensation to families of victims of the September 11th terrorist attacks will surely be divisive, will lead to litigation and by any measure, will be a serious mistake.

Very truly yours,

Comment by
Elaine R. Jones, Director-Counsel
NAACP LEGAL DEFENSE AND EDUCATIONAL FUND, INC.

Cc: Honorable John D. Ashcroft, Attorney General
Kenneth R. Feinberg, Special Master

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[1] In a recent article in Newsday, Deputy Special Master Michael Rozen confirmed the intended use of gender and race-based tables to calculate final damages to be paid to victims of the September 11 attacks on the World Trad Center. Stephanie Saul. Less for Women? Work Life Statistics May Limit Sept. 11 Fund Payouts to Victims, Newsday (New York, N.Y.), Jan. 4, 2002.

[2] We understand that those tables are published by the Bureau of Labor Statistics as Worklife Estimates: Effects of Race and Education (Bulletin 2254) (Feb. 1986) and available at http://www.bls.gov/cps/cpsb2254.pdf.

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N002632

United States Senate

January 17, 2002

Mr. Kenneth Feinberg
Special Master of the Sept 11th Victim Compensation Fund
U.S. Department of Justice
950 Pennsylvania Avenue, N.W.

# APPENDIX H: LETTER FROM CONGRESSMEN

**N002609**

Congress Of The United States
Washington, DC 20515

January 11,2002

Kenneth L. Zwick
Director, Office of Management Programs
Civil Division
U.S. Department of Justice
Main Building, Room 3140
950 Pennsylvania Avenue NW
Washington, DC 20530

Dear Mr. Zwick:

We write to express concerns with the Interim Final Rule (the Rule) published on December 21,2001. 1 Although the Rule makes a good attempt setting forth regulations that would implement the September 11th Victim Compensation Fund which was included in the Air Transportation Safety and System Stabilization Act (P.L. 107-42), the Rule contains procedures that are discriminatory to women and should therefore be revised before becoming final on January 22,2002.

Firstly, the use of outdated data to calculate compensation will negatively impact the families of women who perished or were severely injured on September 11th. The National Association of Forensic Economics (NAFE), an organization of economists and other professionals who measure damages and/or proof of liability in litigation, suggested recently that "[t]he worklife tables used [in the Interim Final Rule] in projection are out of date, and especially inappropriate in the case of loss of earnings for women."2

"Worklife estimates" are an estimate of the number of years equal to the average expected work life of a person. We understand that these statistics will be used, in part, to determine amounts of compensation for the families, therefore, reliable and timely data will be essential for accurate calculations. Yet, the Special Master proposes to use the U.S. Department of Labor, Bureau of Labor Statistics' (BLS), "Worklife Estimates"3 which are outdated charts. These estimates were made in 1979 and will show women working on average five years less than men, a gap that has narrowed over time.4 The Bureau of Labor Statistics' Worklife estimates are, according to the experts, widely considered as "invalid" and "out of date."5 We call on the Special Master to use more widely-accepted, gender-neutral actuarial practices in his calculations. Secondly, in the Rule the Special Master does not take into account household services performed by the working person for the family, such as child care and household upkeep, when determining compensation. For women, replacement of lost services can be significant. The National Association of Forensic Economics' Dr. John Ward, has said that on average, women contribute 25 hours to housework compared to 10 hours for men. For the victim's family, this could mean up to $300,000 in a lifetime.6

According to press accounts, approximately 25 percent of those killed in the September 11th attacks were women. We strongly urge the Special Master to abandon the use of outdated worklife tables that underestimate the time women spend in the workforce. In addition, the Special Master should compensate victim's families for lost household services. Without these changes, families of women who perished or were injured on September 11th will likely be under-compensated.

We realize that the Department is receiving commentary (including comments from some of us who have signed this letter) regarding numerous other aspects of the Rule. This letter is not comprehensive, but is intended to highlight these particular problems. We trust that you will give our comments every consideration when finalizing the regulations to implement the September 11th Victim Compensation Fund.

Sincerely,

Carolyn B. Maloney
Member of Congress

Peter King
Member of Congress

Edolphus Towns
Member of Congress

Carolyn Mccarthy
Member of Congress

Steve J. Israel
Member of Congress

Felix J. Grucci, Jr.
Member of Congress

Nydia Velazquez
Member of Congress

Benjamin A. Gilman
Member of Congress

Jerrold Nadler
Member of Congress

Maurice Hinchey
Member of Congress

Jose E. Serrano
Member of Congress

Gregory W. Meeks
Member of Congress

**Billing Code: 4410-12**

**DEPARTMENT OF JUSTICE**

**Office of the Attorney General**

**28 CFR Part 104**

**CIV 104F; AG Order No.**

**RIN: 1105-AA79**

**September 11th Victim Compensation Fund of 2001**

**ACTION: Final rule.**

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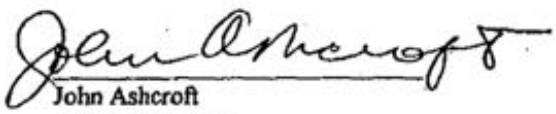
**SUMMARY:** Shortly after the September 11, 2001 terrorist attacks, the President signed the "September 11th Victim Compensation Fund of 2001" (the "Fund") into law as Title IV of Public Law 107-42 ("Air Transportation Safety and System Stabilization Act") (the "Act"). The Act authorizes compensation to any individual (or the personal representative of a deceased individual) who was physically injured or killed as a result of the terrorist-related aircraft crashes on that day. This final rule is the third and final step in the Department of Justice's promulgation of regulations pursuant to § 407 of the Act, following the November 5, 2001 Notice of Inquiry and Advance Notice of Rulemaking ("Notice of Inquiry") and the December 21, 2001 interim final rule.

After reviewing the extensive public comments and meeting with numerous victims, victims' families, and other groups, the Department of Justice, in consultation with the Special Master, is issuing this final rule and associated commentary, which make certain clarifications and changes that are designed to address issues raised by victims, their families, and thousands of

collateral source obligations, or to a civil action against any person who is a knowing participant in any conspiracy to hijack any aircraft or commit any terrorist act. * * *

* * * * *

Dated: March 7, 2002



John Ashcroft
Attorney General

# APPENDIX J: THE ECONOMIST, "LET THEM EAT POLLUTION" MEMO, 1991



of the companies interviewed did not want to be identified). Hans-Jurgen Symalla, head of human resources at Finland's Nokia Consumer Electronics, sums up his firm's position: "Nokia has stopped sending executives on open business-school programmes."

What, then, do companies want from the schools? Those schools that ask—and many of the best ones are doing so—increasingly hear the same answer. Firms want short courses (three weeks, no more) tailored to each firm's specific needs, and taught to its own senior executives (no outsiders, please) by the school's star academics. Alternatively, a handful of firms may get together and ask a school to design a "consortium" course.

The soaring demand for closed, tailored courses is splitting business schools. Most are throwing themselves into the market with gusto. By the mid-1990s, reckons Robert Mittelstaedt, director of executive education at Wharton, 65% of Wharton's revenues will be from tailored programmes—a figure the school is already racing towards with courses made for firms like IBM, Du Pont and KPMG Peat Marwick. At Fuqua, two-thirds of executive-education revenues already comes from company-specific courses; at Britain's Ashridge around 45%; at Northwestern University's Kellogg 40%; and at INSEAD over 30%.

All see customised courses as their fastest growing business; all reckon their academics and curriculums benefit from the close contact with companies that is needed when designing such programmes. Some, like INSEAD and Ashridge, offer post-course consultancy to help executives implement what they have learnt. "We see the business-school professor as a process engineer," says Dominique Hénau, INSEAD's associate dean for executive education.

Contrast that with schools like Stanford, MIT and Harvard, which have shunned tailored courses—mainly because they fear that incestuous partnerships with firms might compromise academic standards. Their unworldliness is losing them business: "We find Harvard's scatter-gun approach is less appropriate these days," says John Watson, director of human resources at British Airways. To stop the rot, Harvard has called in the Boston Consulting Group to help it rethink its courses. Jay Lorsch, chairman of the school's executive-education programme, says it "is considering running company-specific courses." Expect all the dissenters to bow to market pressure before too long.

Tailored courses, however, have one big snag. The cost of designing them (which is rising rapidly as firms grow choosier) and their restricted market (ie, a single firm's managers) mean that they are nowhere near as lucrative as open courses. Insiders reckon that, on average, profits are half those of open courses; often much less. The schools are desperately trying to mark up the already-hefty price-tags on their tailored courses—a move hardly guaranteed to woo new recession-hit customers.

One way in which customers are rebelling against current business-school offerings is especially threatening. Nokia has developed its own programme to groom around 30 high-fliers a year. The 30-month course offers a broad mix of on-the-job training and theory. A mere two months is spent at Switzerland's IMD business school—on a course tailored by Nokia.

Many firms, however, are designing executive-education courses that dispense with the services of individual schools altogether. GM's three-week "Business Management Programme" uses moonlighting academics from schools throughout America; so does AT&T's two-week "Advanced Management Programme". GE's Management Development Institute (which trains 6,000 executives a year) uses a mix of internal teaching staff and "imported" academics, as does the Motorola University. All are stealing business from the business schools.

The schools comfort themselves with the thought that most firms do not have the resources to develop their own programmes, so the corporate competition is likely to remain slight. For now, perhaps. But Nokia has already opened up half the places on its new course to all-comers—and this year received 65 applications for every place. The big schools can afford to lose a few students to such programmes. But many smaller ones, battered by the slump in MBA applications and lacking the clout to lure big firms into tailored programmes, face a darker future.

## Let them eat pollution

LAWRENCE SUMMERS, chief economist of the World Bank, sent a memorandum to some colleagues on December 12th. The *Economist* has a copy. Some of the memo has caused a fuss within the Bank:

> Just between you and me, shouldn't the World Bank be encouraging more migration of the dirty industries to the LDCs? I can think of three reasons:
>
> (1) The measurement of the costs of health-impairing pollution depends on the forgone earnings from increased morbidity and mortality. From this point of view a given amount of health-impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that.
>
> (2) The costs of pollution are likely to be non-linear as the initial increments of pollution probably have very low cost. I've always thought that under-populated countries in Africa are vastly under-polluted; their air quality is probably vastly inefficiently low [sic] compared to Los Angeles or Mexico City. Only the lamentable facts that so much pollution is generated by non-tradable industries (transport, electrical generation) and that the unit transport costs of solid waste are so high prevent world-welfare-enhancing trade in air pollution and waste.
>
> (3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income-elasticity. The concern over an agent that causes a one-in-a-million change in the odds of prostate cancer is obviously going to be much higher in a country where people survive to get prostate cancer than in a country where under-5 mortality is 200 per thousand. Also, much of the concern over industrial atmospheric discharge is about visibility-impairing particulates. These discharges may have very little direct health impact. Clearly trade in goods that embody aesthetic pollution concerns could be welfare-enhancing. While production is mobile the consumption of pretty air is a non-tradable.
>
> The problem with the arguments against all of these proposals for more pollution in LDCs (intrinsic rights to certain goods, moral reasons, social concerns, lack of adequate markets, etc) could be turned around and used more or less effectively against every Bank proposal for liberalisation.

The language is crass, even for an internal memo. But look at it another way: Mr Summers is asking questions that the World Bank would rather ignore—and, on the economics, his points are hard to answer. The Bank should make this debate public.

> . . .
>
> [T]he first opinion that I was asked to render is what this child might have become had he not been rendered disabled. And it's my opinion that based upon the evidence that I reviewed that this child would have been capable of a master's degree, that is two years of study beyond a four-year college degree, and may have been capable of what we call a professional degree, that would be a Ph.D. . . .
>
> . . . *[W]e see children achieving higher levels of education, educational achievement, than their parents as a generality. And it is particularly true in Hispanic families. And one of the reasons for that is that the Hispanic population is a relatively young population within the general fabric of our society. Many of them have been here for maybe one or two generations. And they came from backgrounds, many of them, without substantial educational histories.*
>
> *So even . . . within the Hispanic population there is even a more pronounced tendency for their children to have higher levels of educational achievement than their parents.*

*Id.* at 400:19–406:1, June 30, 2015 (emphasis added).

On cross-examination, defense counsel emphasized the low general educational backgrounds of the ethnic group he characterized as "Hispanics."

> Q . . . Now, in coming up with [your] conclusion, did you look at national statistics in general for males who attain master's degrees and professional degrees, just in general of the population, all people considered, whether they be whites, blacks, Hispanics, Asians, just the entire population, the plurality of the population, did you look at that?
>
> A I did take that into consideration. And as I testified earlier, I was focused on the population of individuals whose ethnicity was Hispanic.
>
> Q Okay. No, I understand that, but I just want to know if in your conclusions if that was part of it, you looked at the whole population, correct?
>
> A Well, when you say "the whole population," I relied upon the normative information . . . [and] the literally hundreds of other studies that have looked at the relationship not only of

parental educational accomplishment but also divided by such factors as ethnicity, socioeconomic status, number of children in the household, whether both parents were present in the household.

. . .

Q My question is . . . did you first look at what the general population is doing in terms of the attainment of master's degrees and professional degrees as a threshold matter? . . .

A Yes, I did. . . .

Q For example, in [one 2009] study, . . . they are looking at males, just males, the entire male population, they are saying 41 percent of them had bachelor's degrees. . . . And then they had other tables, didn't they? *Didn't they have tables that zeroed in on specific ethnicities, correct?*

. . .

*Isn't it true, though, Dr. Reagles, that in those tables the attainment of Hispanics of attaining master's degrees was in the neighborhood of 7.37 percent . . . ?*

. . .

Q *Additionally, in terms of professional degrees, less than 2 percent of Hispanic males earned professional degrees. The exact number is 1.97 percent. . . .*

Q Okay. So when you testified earlier that [G.M.M.] has a better than 70 percent chance of earning a master's degree and a better than 50 percent chance of earning a professional degree, how do you come to that conclusion . . . ?

A Well, again, that was my testimony at the time of our telephone conference. I revisited that particular model and concluded that I couldn't rely upon that model exclusively. I went back to the way that we have done this for years and years . . . and utilized the correlational studies that are in the literature that were cited in my report in arriving at the opinion not with regard to a percentage of probability, but an opinion that had this, the deficits not happened to [G.M.M.], that he would have been capable of achieving a master's degree and perhaps even a professional degree.

. . .

Q [C]orrect me if I'm wrong now, but you look at the parents, but you also have to look at the ethnicity of the individual, right?

A Yes.

Q Their lifestyle, the salaries generated by the parents?

A Socioeconomics.

Q You have to go – it's like an accordion and you're going further and further out because you have to get all of that in order to compress the accordion and get the probability quotient, correct? Would you agree with that assessment?

A With the correlation coefficient.

Q Okay. *So in this particular case, . . . would you say that it is a high probability, a medium probability or a low probability that [G.M.M.], a Hispanic male, will attain a master's degree?*

A *I think it is a moderately high probability that he would, based upon the family circumstances that he came from, had this incident not occurred, he would have had a moderately high probability of completing a master's degree.*

. . .

Q *Now, you're also agreeing with me with the figures that I delineated earlier regarding Hispanics in general and the attainment of master's degrees and professional degrees, correct?*

*Id.* at 417:19–430:21, June 30, 2015 (emphasis added).

Precluding an answer, the court, on its own motion, ruled, excluding ethnicity as a factor in damages computations:

> Excuse me. I won't allow you to continue along those lines. Hispanics is too general a category. . . . You'll have to be more definitive with respect to this particular family. We have professors as well as gardeners who are Hispanics, and I don't believe that we ought to go forward in federal court with that assumption of uniformity . . . .
>
> . . .
>
> *Now, ladies and gentlemen, [addressing the jury] . . . I am now instructing you that as a matter of constitutional and federal law, it is inappropriate where there is a case involving an individual with a Hispanic background to rely upon a table which is undifferentiated as to Hispanic individuals.*

*Id.* at 430:23–431:7, 436:15–20, June 30, 2015 (emphasis added).

The court then inquired of the expert:

> [I]f we struck from the information that you're relying upon undifferentiated statistics with respect to, quote, Hispanics, unquote, in what way, if any, would your testimony be changed?

*Id.* at 436:24–437:2, June 30, 2015.

Dr. Reagles responded: "Not materially and substantially at all." *Id.* at 437:11–12, June 30, 2015.

After the jury left the courtroom, the court explained that it was relying on its decision in *McMillan v. City of New York*, 253 F.R.D. 247 (E.D.N.Y. 2008), and the case's "[d]iscussion of race sociology and statistics." *Id.* at 441:11–14, June 30, 2015. Neither party objected to the ruling. *Id.* at 441:15–20, June 30, 2015.

On July 6, 2015, before plaintiffs' separate economic expert, Dr. Tinari, took the stand, the court reminded the jury of its June 30, 2015 ruling, adding:

> I am now instructing you that as a matter of constitutional and federal law it is inappropriate where there is a case involving an individual with a Hispanic background . . . to rely upon . . . assumptions by a witness [premised on ethnicity.]
>
> You cannot treat the child as an average Hispanic but [may] only [treat] him with respect to his specific characteristics, such as the mother's degree, where he is living, the kind of family he is coming from, et cetera. . . . But *you cannot say that, for example, Hispanics generally go to college less than others and therefore use that statistic or that analysis or that chart.*

Trial Tr. 576:19–577:8, July 6, 2015 (emphasis added). Plaintiffs' economic expert was then instructed as follows:

> I'm instructing you now, doctor, that all your testimony with respect to your projections must be based on this direction I'm now giving to the jury[.]

*Id.* at 577:10–12, July 6, 2015.

The economic expert projected plaintiffs' total future economic losses to be between 2.5 and 4 million dollars. *Id.* at 561:13–16, July 6, 2015. He explained that he had "not included in [his] opinion any assumption of what an average Hispanic would do." *Id.* at 578:3–5, July 6, 2015.

**2. Defendant's Expert**

Dr. Lentz was defendant's forensic economist. *See* Trial Tr. 1128:5–11, 19–21, July 8, 2015. He holds a doctorate in economics and has conducted research and taught at Virginia Tech, Ursinus College, the University of Pennsylvania, and Drexel University. *Id.* at 1129:25–1135:6, July 8, 2015. Dr. Lentz testified about his analysis of occupational inheritance and the plaintiff-child's measure of economic loss. *Id.* at 1128:5–1174:22, July 8, 2015. He found that, because the child-plaintiff was "Hispanic," his future economic loss of earnings was lower than that projected by plaintiffs' forensic economist. *See* Trial Tr. 1140:15–1141:6, 1148:15–19, 1159:16–1160, July 8, 2015. The basis for the assessment was rooted in the following data:

> **Earning Capacity**. According to the National Center for Education Statistics, 2.1 % of *Hispanic males* held a Master's degree or better in 2013 while 13.1 % held a Bachelor's or higher degrees. It can also be noted that 73.1 % of *Hispanic males* held a high school degree or better.

*See* Daubert Hr'g, Court Ex. 8–F at 5, June 22, 2015 (emphasis added).

The following colloquy took place between the court and Dr. Lentz:

> THE COURT: [B]efore you testify, Doctor. . . . I note that your report relies upon Hispanic males' education statistics. . . .
>
> THE WITNESS: Yes.
>
> THE COURT: And Hispanic males' academic achievements.
>
> THE WITNESS: Correct.
>
> THE COURT: On the average.
>
> THE WITNESS: Yes.
>
> THE COURT: I have ruled that it is unconstitutional to base damages on the characteristics of a person injured as a[] Hispanic or a member of any other ethnic group. *So all of your answers should be based upon individual characteristics and not the general characteristics of a group, ethnic group*. Is that clear to you[?]
>
> THE WITNESS: I believe so, sir.

Trial Tr. 1140:15–1141:6, July 8, 2015 (emphasis added).

Taking the court's ruling into consideration, Dr. Lentz ultimately projected that if the plaintiff-child obtained a baccalaureate degree, his total future economic loss would amount to $2,509,542. *Id.* at 1160:2–6, July 8, 2015. If he earned only a high school diploma, his total future economic loss was projected at $1,384,776. *Id.* at 1160:7–12, July 8, 2015. A career pursued in the "arts and design" field after earning one or more postsecondary education degrees was estimated to yield $1,522,067. *Id.* at 1159:16–23, July 8, 2015.