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To: Lorraine D. Hunt OIRA ECON GUIDE/OMB/EOP@EOP

cc: Lorraine D. Hunt OIRA BC RPT/OMB/EOP@EOP Subject: Comments on Draft Guidelines

Please see attached.

- Graham OMB re guidelines April 2003.doc

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April 1, 2003

Dr. John D. Graham, Administrator Office of Information and Regulatory Affairs United States Office of Management and Budget NEOB, Room 10202 725 17th Street NW WASHINGTON, DC 20503

UNIVERSITY OF

Delivered by email to: OIRA_ECON_GUIDE@omb.eop.gov with a cc to: OIRA_BC_RPT@omb.eop.gov

Dear Dr. Graham:

Re: Request for Comments on the Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulations including especially Appendix C: OMB Draft Guidelines for the Conduct of Regulatory Analysis and the Format of Accounting Standards

I am pleased to provide herewith these comments on the Draft Report and on the Draft Guidelines that appear therein as Appendix C. These remarks start with a brief summary of my background, qualifications and interest in providing such feedback, and then proceed to address a number of specific topics. Topics follow the general sequence in which they appear in the OMB Draft Guidelines as published in the *Federal Register* (66:22, February 3, 2003). In some cases where I discuss the Guidelines, I also identify linkages to the same issues having appeared in the Draft Report.

I write as an economist and agricultural economist who has studied and taught various courses in benefit-cost analysis (BCA) at the graduate and undergraduate levels over more than a decade on faculty at the University of Calgary, Canada. I have also worked as a consultant (participating in studies of transport, hydroelectric and agricultural projects) and in government (commissioning and reviewing BCA work and recommending related investment projects). I have written on aspects of BCA methodology and practice, including a 2002 paper on valuing project labour and a 2002 conference presentation related to choice of social discount rate. [See also: <u>http://econ.ucalgary.ca/horbulyk.htm</u>.]

It appears increasingly likely that my course notes and writings in the same general topic area as your Draft Report will continue to motivate my authorship of other articles in the academic literature and quite possibly a handbook or textbook directed towards students or practitioners. For all of these reasons, I was eager to read your recent drafts and to provide this comment on them.

.../2

I understand that between OIRA and the CEA you have access to a staff with considerable technical expertise in economics, some members of which may be asked to review comments such as these that are submitted. Anticipating such an audience, I shall try to keep each of these comments brief and to the point, on the expectation that I could be contacted for any clarification that might be required. In expressing the following arguments, I am drawing upon and relying upon a large and evolving economics literature with which these staff members will be familiar. I shall not cite references or sources for each of my comments, but assert that I am only presenting views for which I feel such technical support could readily be marshalled. I acknowledge also that, on many of these topics there is a considerable range of published views, some of which oppose my own and some of which are apparently not well supported by economic theory or logic.

<u>Guidelines, Section IV</u> – A. How to Develop a Baseline (page 5517)

Consider prescribing the reference group for such analyses. There are a number of preliminaries that ideally should frame such an analysis, such as whose benefits and costs will be considered (the "reference group") and over what time frame. These issues could be addressed more directly in the Guidelines. For example, from footnote 23 that appears later, it becomes clear that the reference group should normally only include the residents of the United States. Thus, for example, in reviewing regulations related to homeland security, if there are large benefits or costs to members of the traveling public who are <u>not</u> in this reference group (e.g., foreign nationals), then their benefits and costs should be excluded, except where these benefits are somehow monetized such as through a security fee. For some regulations, there might be issue of whether to include benefits to US territories, protectorates or assets that are not part of the contiguous states plus Alaska and Hawaii.

Consider giving advice on the minimum or maximum time frame that is relevant or reasonable.

The time frame ("project life") issue is sometimes problematic in other applications if the evaluators choose a time frame that is too short, especially if they do not deal accurately with residual benefits, salvage values and so on. If I understand it correctly, you indicate a willingness to include <u>directly</u> all future generations (as discussed later on page 5522) where an alternative practice in social benefit cost analysis would be to include (as an issue of "timing and reference group) <u>only</u> the effects on generations currently alive, and in that process to allow an <u>indirect</u> effect. That is, there would be an eligible benefit or cost to the extent that current generations are themselves made better off or worse off (altruistically) when there is a change in the welfare of future generations. Note, that if it really is your intent to take all future generations as the reference group, then this can influence your choice of discount rare, and your discussion on that topic does not address this issue well.

<u>Guidelines, Section IV</u> – B. How to Develop Benefit and Cost Estimates; 2. The Key Concepts Needed to Estimate Benefits and Costs (page 5518)

This situation may be misleading as written, so that readers may get the incorrect advice even if no single statement in your guideline is by itself factually incorrect. The line of reasoning here seems to suggest that opportunity cost is central, and is captured by WTP (usually in preference to WTA) and that WTP is the key concept in estimating costs and benefits.

As a key concept, I submit that proposals or alternatives (on both the cost and benefit side) will, in general, affect both the quantities of goods consumed and the quantities of goods produced. Adapting your example, if regulatory stringency causes some producers of a drug, food additive or hazardous chemical to exit the industry, then higher prices might result, in turn reducing the quantities of goods consumed (a change in quantity demanded). For these units, WTP would be an appropriate measure of the benefit foregone. But the other part of the market's adjustment to those firms' exit, might be that the remaining firms pick up part of the slack by increasing their own quantities of goods produced (increase in quantity supplied). For these units, WTP would not be an appropriate measure of the benefit foregone, rather one would want to know the opportunity cost of the resources used by the existing firms to produce the extra output. Imagine a situation where the exiting firms no longer produce 100 units per year, consumers cut back consumption by 80 units, and other remaining firms produce an extra 20 units. In this case, consumers' WTP is the key valuation concept for 80 units, whereas firms' (society's) production costs are the key valuation cost for the other 20 units. In principle, any division of the 100 units between the two concepts is possible depending upon the relative supply and demand elasticities. In highlighting key concepts, your draft may inadvertently emphasize the consumers' WTP, and suppress the important role of opportunity costs incurred by firms and society, for example. In general, the two distinct concepts are equally relevant.

<u>Guidelines, Section IV</u> – *B. How to Develop Benefit and Cost Estimates;* 3. How to Use Market Data Directly (page 5518)

The following statement (which appears) is not always true and may not be generally true: "If the price is held above the market price by a government program that affects supply however, a value based on this price would overstate the true benefits of controlling the pollutant." I submit that in some cases, this "artificially elevated" price is exactly the value of the social benefit. I concede it is not if the crops are exported or stockpiled under the conditions in your special illustrative examples. On the other hand, suppose the crops are sold into a domestic market where there is protection from competition (such as from other domestic and/or imported crops), which protection will remain with or without the proposal under study (i.e., to reduce air pollution). That elevated market price is likely to exceed social marginal cost and to reflect accurately social marginal benefit per unit. This example contradicts the sentence quoted above. [Note: I am not (only) complaining about the reference to price being held above price, you can work that out separately.]

This section also raises the notion of a shadow price, and really should give a few more specific places where shadow prices come into play, such as by referencing unemployment, tariffs and trade barriers, taxes, externalities and so on. I appreciate that you have not written a textbook, but these concepts are key and you have elsewhere shown an ability to give the essential argument tersely.

<u>Guidelines, Section IV</u> – B. How to Develop Benefit and Cost Estimates; 8. Monetizing Health and Safety Benefits and Costs (page 5520)

The opening paragraph focuses on issues related to "WTP for improvements" to the exclusion of "benefits that come from resource savings, such as within the health care system" where in principle, either type of effect may be relevant or dominant, and where both may be present to a degree. [This is related methodologically to the issues in the above comment on B.2, page 5518.]

b. Premature Mortality Risks (page 5521)

James Heckman of Chicago has some recent work with co-authors that illustrates that many of the published hedonic wage-risk studies, especially those that impose linear functional forms, are not identified in an econometric sense. This is due largely to the combined effect of systematic inter-worker and inter-firm differences, such as the well-known worker selection issues in the early estimates of Thaler and Rosen. If I understand Heckman correctly, many of the published numerical estimates may be essentially meaningless—the estimated values are more likely to be coincidence or wishful thinking than indications of economic behavior supported in logic by data. Heckman *et al.* are proposing better estimation methodologies. Until those results are in, you might be advised to qualify the repeated endorsement of such studies and results, and to indicate some of the other valuation methods that have also been used. [This issue also arises in footnote 8 to Chapter I of the Draft Report to Congress, and in footnote 12 to Chapter II.]

<u>Guidelines, Section IV</u> – *C. What discount rate to use* (page 5522)

I have a number of comments here, upon which I could elaborate a little if needed. I suspect the problems I identify—without elaborating more fully—may lie in the Circular A-94, and I am not sure if these draft Guidelines will replace that Circular. If that Circular remains in force, then even so:

- there is insufficient clarity throughout this section, in my view, to distinguish among discount rates based on time preference and those based on opportunity costs;
- in the middle of the first column, the reference to "real rate of return on long-term government debt" should specify whether the 3% cited is before or after tax;
- the mention of 10 to 25% should indicate whether any market determined risk premium is included or has been removed;
- the first partial paragraph of the middle column does a disservice to the earlier parts of these Guidelines wherein shadow pricing is encouraged.

[This issue also arises in Chapter II of the Draft Report to Congress at page 5498.]

<u>Guidelines, Section IV</u> – D. Treatment of Uncertainty; 2. Assigning Economic Values to Uncertain Outcomes (page 5524)

Without some substantive discussion of the important roles of risk spreading (Arrow-Lind Hypothesis) and risk pooling (portfolio diversification in a portfolio of "regulatory projects") as determinants of the importance (or not) of aggregate risk-taking to society, this discussion should be seen as incomplete and potentially misleading.

Guidelines, Section IV -	E. Other Key Considerations;
	2. The Difference Between Costs (or Benefits) and Transfer Payments
	(page 5524)

There may be insufficient clarity here, but I suspect the following statement is plainly in error or may lead people to interpret the correct course of action erroneously. "The reduction in the total value of the supply of the good is a real cost to society, but the transfer of income from buyers to sellers resulting

from the higher price is not. You should not include transfers in the estimates of the of the benefits and costs of a regulation."

Near the top of page 3 of this letter, I discuss an example where the reduction of a good is valued in part (for 80% of the output change) using WTP. I submit now that the total WTP per unit is the relevant value, even if some of the revenue were to go to say a monopolistic producer as economic rent. It would be incorrect to identify and exclude some portion of the revenue as being a "transfer of income from buyers to sellers." For the other 20% of the units, the valuation measure I identified was related to social marginal costs of production, and would not include those transfers by definition.

Try to reconcile for your readers the statement quoted here, and another that appears on page 5518, where it states: "…—is the foregone net benefit (i.e., lost consumer and producer surplus¹⁸) …." How is it then, that changes in consumer and producer surplus in one instance can be the key determinants of social benefit, yet later one is encouraged to isolate and exclude transfers between or among consumers and producers, where these are largely manifest as changes in consumer and producer surplus?

The bulleted list of proposed transfer payments is problematic for all of the foregoing and other reasons.

<u>Guidelines, Section VI - Accounting Statement, Separate Reporting of Transfers (page 5525)</u>

There may be important "efficiency effects" associated with transfers, so that these effects will be both transfers, and give rise to (albeit smaller in dollar value) costs or benefits because of those transfers. Whether or not a regulatory proposal proceeds, there is an economic cost, for example, of transferring income from high income to low income households via taxation and expenditure/entitlement programs. When a regulatory action produces such redistributive effects as a "by-product," the rest of the fiscal system is spared those costs, and the regulatory reform should legitimately include an additional social benefit, for example. [This issue also arises in footnote 4 to Chapter I of the Draft Report to Congress.]

Also in this section, there could be a benefit to users if these Guidelines were to highlight the important difference between costs and benefits to various identified sub-groups, and other notions of effects and impacts, especially where there may be resort to any form of macroeconomic impact multipliers. Whatever use is ever made of the latter, they should not be confused with or misrepresented as the former.

Please contact me if I can be of further assistance or if I can provide further clarification of any of this.

Sincerely,

Ted Horbulyk, PhD Associate Professor