Supplemental Materials for William Lehr and Frank R. Lichtenberg, "Computer Use and Productivity Growth in US Federal Government Agencies, 1987-92," *The Journal of Industrial Economics* 46 (2), June 1998, pp. 257-279

Supplemental Regression Results

On page 276 of the published article, the authors report:

"In addition to the equations shown in Table V, we estimated a number of models including various measures of changes in the *composition* (e.g. the fraction of computer systems that were PCS), as well as the total *amount*, of IT capital. Significant coefficients on these variables would be consistent with the hypothesis that the relative marginal benefit of different kinds of IT capital differed from their relative marginal costs. However the coefficients on these variables were not significantly different from zero, and their inclusion did not affect the estimate of β_1; CII's estimate of the total value of IT assets appears to represent a 'sufficient statistic' from the perspective of productivity analysis. These additional estimates are reported on the *Journal's* editorial Web page."

These results are presented in the attached table.

Table V Supplemental Regressions
Estimates of the Production Function for Government Services[1]

Column	4	5	6	7
Independent Variable (in growth rates)				
Computer assets per employee	0.059 (0.023)			
No. of employees	-0.273 (0.141)			
Share of systems which are not PCs[2]	0.015 (0.017)			0.005 (0.022)
PCS and terminals per employee		0.020 (0.025)		0.043 (0.035)
Share of systems which are PCs[2]				-0.055 (0.052)
Systems per employee			0.012 (0.022)	0.009 (0.024)
Intercept	0.012 (0.005)	0.006 (0.009)	0.010 (0.005)	0.008 (0.012)
Number of observations	43	46	45	45
R^2	0.26	0.01	0.01	0.07

[1] The dependent variable is the growth rate of output per employee. Heteroskedasticity-consistent standard errors in parentheses. All regressions weighted by BLS coverage ratio.

[2] Dependent variable is change in share of systems instead of growth rate.