



January 23, 1970

NOTES RELATING TO QUANTITATIVE ESTIMATES OF MOVEMENTS OF
JOB TITLES AMONG MAJOR OCCUPATION GROUPS

The attached materials show the movements of job titles between major occupation groups as a result of the restructuring of the 1960 Occupation Classification System to the 1970 System and an estimate of the size of these changes in terms of the 1960 experienced civilian labor force (ECLF). These estimates of change were made during the development of that system rather than at the conclusion. Therefore, they are preliminary and will be revised at the time of publication.

The total estimated change within the system was 3,714,732 workers. However, of this number 2,672,120 were changed as a result of the establishment of a new major group Transport Equipment Operatives, which came exclusively from the 1960 Operatives major group. Therefore, a user of 1970 Census data can add the two operative groups together for comparability to 1960. The quantification of the shifts among major groups, excluding transport equipment operatives, is 1,042,612.

Our estimate of the size of the shifts was derived from a 100,000 card deck sample of the 1960 Census. The cards contain the handwritten industry and occupation entries from the 1960 Census schedules, as well as the industry and occupation 3-digit codes, class of worker, labor force status, and selected demographic items.

The average weight for each card is 680, but the weights were computed individually, by sex, for each 1960 category that was changed. The weight was computed by dividing the number of cards in the card deck for a category/sex group by the 1960 ECLF for the group.

Attachment

SUMMARY OF ESTIMATED CHANGES AMONG
MAJOR OCCUPATION GROUPS--1960 TO 1970
(Preliminary Estimates)

Major Group (1970 terms)	1960 Experienced Civilian Labor Force				
	1960 Classification	Add	Subtract	1970 Classification	Net Chang
TOTAL	67,990,073	3,714,734 ^{1/}	3,714,734 ^{1/}	67,990,073	---
Professional, Technical, & Kindred Workers	7,335,699	60,259	175,442	7,220,516	-115,183
Managers & Administrators, Except Farm	5,489,489	156,644	23,523	5,622,610	+133,121
Sales Workers	4,801,341	35,759	---	4,837,100	+ 35,759
Clerical & Kindred Workers	9,617,487	718	189,968	9,428,237	-189,250
Craftsmen & Kindred Workers	9,240,983	218,508	185,819	9,273,672	+ 32,689
Operatives, Except Transport	12,846,044	98,698	3,063,808	9,880,934	-2,965,110
Transport Equipment Operatives	---	2,672,120	---	2,672,120	+2,672,120
Laborers, Except Farm	3,530,022	171,834	59,542	3,642,314	+112,292
Farmers and Farm Managers	2,525,907	---	---	2,525,907	---
Farm Laborers and Farm Foremen	1,559,524	41,634	---	1,601,158	+ 41,634
Service Workers, Except Private Household	5,765,481	258,560	9,224	6,014,817	+249,336
Private Household Workers	1,824,817	---	7,408	1,817,409	- 7,408
Occupation Not Reported	3,453,279	---	---	3,453,279	---

^{1/} Excluding shift of operatives to transport equipment operatives, this would be 1,042,614.

^{2/} Net change of operatives, excluding shift to transport equipment operatives is a loss of 292,990.

U.S. DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

PRELIMINARY ESTIMATES OF THE SIZE OF OCCUPATIONAL
CATEGORIES AND TITLES CHANGING MAJOR GROUPS
BETWEEN 1960 AND 1970 - 1960 CENSUS DATA

	<u>1960 ECLF</u>
PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS (1960)	7,335,699
 Add:	
Mechanical engineers to "same" (from Managers--Officers, pilots, pursers and engineers, ship)	10,419
Mining engineers to "same" (from Clerical--Agents, n.e.c.)	1,906
Fiscal agents to Accountants (from Clerical--Agents, n.e.c.)	1,906
Investment analyst to economist (from Clerical--Clerical, n.e.c.)	2,785
Employment interviewer to Personnel, etc., (from Clerical--Clerical, n.e.c.)	4,141
Cost Analyst to accountant (from Clerical--Clerical, n.e.c.)	14,661
Numerous titles to various groups (from Clerical--Clerical, n.e.c.)	10,999
Teachers to teachers except College, etc., (from Craftsmen--Foremen, n.e.c.)	7,407
Flight engineers to "same" (from Craftsmen--Mechanics and repairmen, airplane)	2,111
Medical assistants to Nurses (from Clerical--Attendants, phy. etc.,)	3,924
TOTAL	60,259
 Subtract:	
Elementary and secondary administrators from Elementary and secondary teachers (to Managers--new)	103,083
College presidents and deans from "same" (to Managers--College administration)	7,175
Dental laboratory technicians from Med. and dental tech. (to Craftsmen--new category)	7,053
Decorators from Artists and art teachers (to Operatives--painters, mfg. articles)	582
Student nurses from "same" (to Service--Health trainees)	57,549
TOTAL	175,442
PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS (1970)	7,220,516
NET CHANGE	Loss 115,183

MANAGERS, OFFICIALS, AND PROPRIETORS, EXCEPT FARM (1960)

1960 ECLF

5,489,489

Add:

Jurors to Officials, administrators, public administration (from Clerical--Agents, n.e.c.)	3,155
Landmen to Purchasing agents, n.e.c. (from Clerical--Agents, n.e.c.)	13,339
Booking agents to Managers, n.e.c. (from Clerical--Agents, n.e.c.)	7,770
Tour and travel agents to Managers, n.e.c. (from Clerical--Agents, n.e.c.)	8,512
Field Representatives, food manufacturing to Buyers and Shippers, farm produce (from Clerical--Agents, n.e.c.)	6,669
Elementary and secondary administrators to new category (from Professional--Elementary and Secondary teachers)	103,083
College administrators to new category (from Professional--College deans)	7,175
Numerous titles to various groups (from Clerical--Clerical, n.e.c.)	6,941

TOTAL 156,644

Subtract:

Mechanical engineers from Pilots, pursers, etc., (to Professional--Mechanical, engineers)	10,419
Stock and bond brokers from Managers, n.e.c. (to Sales workers--stock and bond)	13,104

TOTAL 23,523

MANAGERS AND ADMINISTRATORS, EXCEPT FARM (1970)

5,622,610

NET CHANGE

Gain 133,121

SALES WORKERS (1960)

1960 ECLF
4,801,341

Add:

Hostesses, welcoming service, to Hucksters and peddlers (from Clerical--Agents, n.e.c.)	4,404
Stock and bond brokers, to Stock and bond salesmen (from Managers--Managers, n.e.c.)	13,104
Sales representatives to salesmen to services (from Clerical--Agents, n.e.c.)	18,251

TOTAL 35,759

SALES WORKERS (1970)

4,837,100

NET CHANGE

Gain 35,759

CLERICAL AND KINDRED WORKERS (1960)

1960 ECLF
9,617,487

Add:

Dispatchers to Dispatchers, etc., (from Operatives Mine Operatives)	718
---	-----

Subtract:

Booking agents from Agents, n.e.c. (to Managers--new category)	7,770
Travel agents from Agents, n.e.c. (to Managers--new category)	8,512
Various occupational categories from Agents, n.e.c. (to: Managers and Administrators	23,163
Sales Workers	22,655
Professional, technical...workers	3,812
Service workers)	2,859
Medical assistants from Attendants, phy., etc., (to Professional--nurses)	3,924
Dental assistants from Attendants, phy., etc., (to Service workers--Health service)	48,157
Health aides from Attendants, phy., etc., (to Service workers--Health service)	10,464
Baggage handlers from Baggage men, transportation (Laborers--Freight and material handlers)	5,162
Miscellaneous occupations from Clerical, n.e.c. (to: Operatives	13,264
Professionals	32,586
Managers	6,941
Laborers)	699

TOTAL	<u>189,968</u>
-------	----------------

CLERICAL AND KINDRED WORKERS (1970)

9,428,237

NET CHANGE

Loss 189,250

CRAFTSMEN AND KINDRED WORKERS (1960)

1960 ECLF
9,240,983

Add:

Excavators to Excavating, grading (from Operatives-- Mine operatives)	718
Carpenters to Carpenters (from Operatives--Mine Opera- tives)	5,741
Charger operators to Heat treaters (from Operatives-- Furnacemen)	706
Painters, aircraft and ships, to Painters, construction and maintenance (from Painters, exc. construction and maintenance)	8,073
Shoe repairmen, factory to Shoemakers and Repairers (from Operatives--Operatives, n.e.c.)	2,611
Alterers to Tailors (from Operatives--Laundry Oper.)	5,710
Caterpillar drivers to Bulldozer operators (from Opera- tives--Truck and tractor drivers)	35,713
Dental technicians to new category (from Professional-- Technicians... and dental)	7,053
Floor sanders to Floor layers, exc. tile (from Operatives-- Operatives, n.e.c.)	2,618
Furniture and wood finishers to Furniture and wood finish- ers (from Operatives--Painters, exc. construction)	35,266
Power station operators to Craftsmen (from Operatives-- Power station operators)	27,155
Apprentices, various to Craftsmen, various (from Opera- tives--various crafts)	85,709
Mechanics to Mechanics and repairmen, n.e.c. (from Opera- tives--Mine operatives)	1,435
TOTAL	<u>218,508</u>

Subtract:

Teachers, manufacturing from Foremen, n.e.c. (to Profes- sional--Teachers, exc. college, n.e.c.)	7,407
Flight engineers from Mechanics and repairmen (to Profes- sional--Technicians, flight engineers)	2,111
Various occupation from Mechanics and repairmen, n.e.c. (to Laborers--various group)	2,864
Maintenance men from Mechanics and repairmen, n.e.c. (to Service--Janitors)	135,659
Hookers from Rollers and roll hands (to Laborers-- Laborers, n.e.c.)	2,396
Riveters from Structural metal workers (to Operatives-- Riveters)	2,418
Lathers from Craftsmen, n.e.c. (to Operatives--Dry Wall inst.)	22,224
Vending machine servicemen from Mechanics and repairmen, n.e.c. (to Trans. equip. operatives--Deliverymen)	10,740
TOTAL	<u>185,819</u>

CRAFTSMEN AND KINDRED WORKERS (1970)

9,273,672

NET CHANGE

Gain 32,689

OPERATIVES AND KINDRED WORKERS (1960)

1960 ECLF
12,846,044

Add:

Meat carvers to Meat cutters, exc. slaughter (from service-- Kitchen helpers)	668
Lathers to Dry wall installers (from Craftsmen, n.e.c.)	22,224
Riveters to Riveters and fasteners (from Craftsmen-- Structural metal workers)	2,418
Decorators to Painters, manufactured articles (from Prof.-- Artists and art teachers)	582
Garage workers to Auto attendants (from Laborers--except farm and mine)	59,542
Miscellaneous (from Clerical, n.e.c.)	13,264
TOTAL	98,698

Subtract:

the following and add to Transport Equipment Operatives--
new category

Boatmen and Canalmen from Operatives	5,348
Brakemen, railroad from Operatives	65,143
Bus drivers, from Operatives	184,905
Conductors, bus, from Operatives	4,332
Deliverymen and routemen, from Operatives	438,002
Motormen, mine, etc., from Operatives	14,558
Motormen, street, subway, from Operatives	7,531
Parking attendants from Attendants, auto	45,679
Switchmen, railroad from Operatives	59,535
Taxi cab drivers from Operatives	170,832
Truck and tractor drivers from Operatives	1,351,372
Truck drivers from Mine Operatives	2,153
Truck drivers, retail trade from Truck and tractor	229,540
Fork lift and tow motor from Operatives, n.e.c.	59,327
Motormen from Mine Operatives	8,612
Brakemen, from Mine Operatives	10,047
Drivers, sales from Truck and tractor	4,464
Animal caretakers from Operatives, n.e.c. (to Laborers-- new category)	10,756
Apprentices from Operatives (to Craftsmen--by trade)	85,709
Apprentices from Operatives (to Service--Personal service apprentice)	1,906
Carpenters from Mine Operatives (to Craftsmen--Carpenters)	5,741
Catepillar drivers from Truck and Tractor (to Craftsmen-- Bulldozer operators)	35,713
Charge Operators from Furnacemen, etc., (to Craftsmen-- heat treaters)	706
Checkers from Laundry Operatives (to Laborers--Stock handlers)	31,721
Dispatcher from Mine Operatives (to Clerical--Dispatcher)	718

Excavating Machine Operators from various Operatives (to Construction--Excavating and grading)	718
Floor sanders from Operatives, n.e.c. (to Craftsmen--Floor layers)	2,618
Furniture and wood finishers from painters, exc. construction (to Craftsmen--new category)	35,266
Laborers from Mine Operatives (to Laborers--n.e.c.)	56,694
Lockkeepers from boatmen, etc., (to Service--Protective service workers)	1,966
Material handlers from Mine Operatives (to Laborers--new category)	34,447
Painters, aircraft and ships from Painters, exc. construction (to Craftsmen--Painters, construction and maintenance)	8,073
Power station operative from Operatives (to Craftsmen--new category)	27,155
Repairmen from Mine Operatives (to Craftsmen--repairmen, n.e.c.)	1,435
Sack boys from Packers and wrappers (to Laborers--stock handlers)	11,131
Sewers (alterers) from Laundry Operatives (to Craftsmen--Tailors)	5,710
Shoe repairmen from Operatives, n.e.c. (to Craftsmen--new category)	2,611
Tractor operatives from Truck and Tractor (to Farm laborers)	41,634

TOTAL 3,063,808

OPERATIVES, EXCEPT TRANSPORT (1970) 9,880,934

NET CHANGE	Transport Equipment Operatives 2,661,380	} Loss	2,965,110
	Other 303,730		

TRANSPORT EQUIPMENT OPERATIVES (No 1960 equivalent) 1960 ECLF

Add:

From various Operatives groups (shown listed above under "operatives" subtraction) 2,661,380

Vending machine services to Deliverymen (from Craftsmen--Mechanics and repairmen) 10,740

TOTAL 2,672,120

TRANSPORT EQUIPMENT OPERATIVES (1970) 2,672,120

NET CHANGE Not Applicable

LABORERS, EXCEPT FARM AND MINE

1970 ECLF
3,530,022

Add:

Gardeners to Gardeners and groundskeepers (from Private Household--Private Household, n.e.c.)	7,408
Baggage handlers to Freight and material handlers (from Clerical--Baggagemen)	5,162
Material handlers to Freight and material handlers (from Operatives--Mine operatives, n.e.c.)	34,447
Hookers to Laborers, n.e.c. (from Craftsmen--Roll hands)	2,396
Laborers to Laborers, n.e.c. (from Operatives--Mine operatives)	56,694
Checkers to Stock handlers (from Operatives--Laundry operatives)	31,721
Sackers to Stock handlers (from Operatives--Packers and wrappers)	11,131
Porters, auto establishments to Vehicle Washers (from Service workers--Porters)	8,556
Animal caretakers, except farm to new category (from Operatives--Operatives, n.e.c.)	10,756
Warehousemen to Warehousemen, n.e.c. (from Clerical--Clerical, n.e.c.)	699
Numerous titles to various groups (from Craftsmen--Craftsmen, n.e.c.)	2,864
	<hr/>
TOTAL	171,834

Subtract:

Garage workers from Garage Laborers (to Operatives--Garage workers and attendants)	59,542
	<hr/>
TOTAL	59,542

LABORERS (1970)	3,642,314
NET CHANGE	Gain 112,292

FARMERS AND FARM MANAGERS

1960 ECLF
2,525,907

No change

FARM LABORERS AND FOREMEN

1,559,524

Add:

Tractor drivers to Farm Laborers (from Operatives--Truck and tractor drivers)	41,634
FARM LABORERS AND FOREMEN (1970)	1,601,158
NET CHANGE	Gain 41,634

SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD (1960) 1960 ECLF
5,765,481

Add:

Passenger Representatives to Attendants, personal service (from Clerical--Agents, n.e.c.)	1,906
Special Agents in R.R. industry to Guards and watchmen (from Clerical--Agents, n.e.c.)	953
Personal service apprentices to new category (from Operatives--Other specified trade apprentices)	1,906
Student nurses to Service workers (from Professional--nurses, student)	57,549
Lockmen to Watchmen, etc., (from Operatives--Lockmen)	1,966
Dental Assistants to Health service (from Clerical--attendant, physicians, etc.,)	48,157
Health aides to Health service (from Clerical attendants, physicians, etc.,)	10,464
Maintenance men to Janitors (from Craftsmen--Mechanic, n.e.c.)	135,659
TOTAL	<u>258,560</u>

Subtract:

Meat carvers from Kitchen workers (to Operatives--Butchers, exc. mfg.)	668
Porters, auto establishments (to Laborers--Vehicle washers)	8,556
TOTAL	<u>9,224</u>

SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD (1970) 6,014,817
NET CHANGE Gain 249,336

PRIVATE HOUSEHOLD WORKERS (1960) 1960 ECLF
1,824,817

Subtract:

Caretakers from Private household, n.e.c. (to laborers--Gardeners)	7,408
--	-------

PRIVATE HOUSEHOLD WORKERS (1970) 1,817,409
NET CHANGE Loss 7,408