

## THE Business Income Exposure: Properly Insuring the MOST Important Property Exposure

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### Topics for Today

- Four Key Concepts
- Conquering the Business Income Worksheet
- Calculating Limits
- "Insurable" vs. "Compensable" Business Income
- Extended Business Income
- Dependent Property Coverage (Contingent Business Income)

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### Four Key BI Concepts

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## Four Key Business Income Concepts

- Business Income
- Period of Restoration
- Operational Capability
- "Time Doctrine"

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## "Business Income"

**Net Income** (Net Profit or Loss before income taxes) that would have been earned or incurred; and **[PLUS]**

**Continuing normal operating expenses** incurred, including payroll

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## "Net Income"

**NOT** defined the same as it is within the world of finance!

- Business Income Form: "Net profit (or loss) **before** income taxes"
- In finance/accounting, "net income" means: "Gross revenue minus all business and production-related expenses"

If the risk is classified as a manufacturing operation, this amount includes the **sales value** of production!

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### “Continuing Normal Operating Expenses”

- Normal operating expenditures that continue (in whole or in part) during the time the operations are discontinued due to a direct property loss.
- Includes payroll, unless reduced or altered by endorsement (CP 15 10)
- Non-continuing operating expenses are **not** included within the definition of “Business Income.”
- It is not necessary to know which operating expenses will or will NOT continue when developing the business income limit

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### “Period of Restoration”

- Time period beginning after the direct physical loss or damage and ending on the earlier of:
  - (1) the date the property should be repaired, rebuilt or replaced with reasonable speed and similar quality; or
  - (2) the date when business is resumed at a new permanent location.

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### 2 Key “Period of Restoration” Requirements

- Direct physical loss/damage to the insured property itself; and
- The damage must be caused by a “Covered Cause of Loss”

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#### 4 Period of Restoration Objectives

1. Repair or rebuild the insured structure or find an alternative permanent location
2. Locate, purchase, install and have operational replacement machinery and equipment
3. Replace or replenish stock
4. Return as quickly as possible to the same level of “operational capability” existing just prior to the loss

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#### “Operational Capability”

- This term is not found in the business income policy, but it defines the end of the period of restoration
- An entity’s ability to operate at or as nearly as possible at pre-loss sales or production levels
- Operational Capability can be accomplished by repairing or rebuilding the current location; or by finding a new permanent location

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#### “Time Doctrine”

- Terminology is not found in the policy
- “Business Income” losses are settled based on the **coverage limit** purchased
- The Coverage limit is based on two factors
  - The 12-month business income exposure; and
  - The worst-case “period of restoration”
- The Key to business income is the correct estimation of time

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### “Time Doctrine” Defined

All business income losses are settled based on the coverage limit purchased. An accurate business income coverage limit calculation depends on the legitimate estimation of the worst-case period of restoration. Estimating the worst-case period of restoration necessitates understanding the time required to accomplish the 10 steps within the four “period of restoration” objectives. The key to business income is the correct estimation of time.

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### Conquering the Business Income Worksheet

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### Why Underwriters Need the CP 15 15

- Time Element’s Equivalent of the Commercial Property Schedule.
- Nothing More than the Starting Point in the BI Underwriting Process
- Designed to Help the Insured and Agent Develop the 12-month estimated BI Exposure

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## Worksheet Details

### Four Columns

- Two for Manufacturing
- Two for Non-Manufacturing

### Can be Divided into Two Halves

- First two columns request information about the year **ENDING**
- Second set of columns requests information about the **UPCOMING** year (estimated data)

### The Most Important Column – the **ESTIMATED** column

Most of the Information for Completing the Worksheet can be Found in the Year-End **Income Statement**

Does not always follow GAAP

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## Step-by-Step Guide – Page 1 Information Page

• **Accrual Basis:** The BI worksheet is to be completed using the accrual basis of accounting. If the insured uses Cash Basis, the data must be converted to accrual basis.

• **Agreed Value:** If the Agreed Value coverage option has been chosen, the insured must provide requested info and sign.

• **BI Premium Adjustment (CP 15 20):** If this endorsement is used, the insured must certify the information provided in the form. Makes it a type of Reporting Form.

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## Step-by-Step Guide – Page 2: Income & Expense Calculation

• **"Ending" and "Estimated":** The more important of the two is "Estimated."

• **Manufacturing and Non-Manufacturing:** Only two columns must be completed.

• **"A" Gross Sales:** Applies to both manufacturing and non-manufacturing operations.

• **"B" & "C" Finished Stock Inventory:** Only Applies to Manufacturing Risk.

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## Step-by-Step Guide – Page 2: Value of Finished Stock

BUSINESS FORM 990-B (2015) (REV. 03-15-15)			
Income And Expenses	12 Month Period Ending		Estimated For 12 Month Period Beginning
	Manufacturing	Non-Manufacturing	Manufacturing
A. Gross Receipts			
B. Deduct: Inventory at the beginning of the period			
C. Add: Inventory at the end of the period			
D. Gross Sales Value Of Production			
E. Deduct:			
1. Freight			
2. Returns And Allowances			
3. Bad Debts			
4. Charitable Contribution			
F. Net Sales			
G. Add:			
1. Other Receipts From Your Business Operations (not reported on lines 1-4)			
2. Commissions Or Fees			
3. Other Income			
H. Total Receipts			

"B" – Deduct the Sales Value of Finished Stock at the **Beginning** of the Period

"C" – Add the Sales Value of Finished Stock at the **End** of the Period

To Develop the **Finished Stock Value**:

- Divide inventory into its three component parts:
  - Cost of Raw Material
  - Cost of Stock in Process
  - Cost of Finished Stock (Internal Cost)
- Apply one of two Methods to Arrive at the Sales Value
  - "Mark Up" (Margin) Method
  - "Percentage-of-Net-Sales" (Percentage) Method

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## Developing Sales Value

- "Mark Up" (Margin) Method

$$\text{Cost} \times (1 + \text{Profit Margin}) = \text{Sales Value of Production}$$

- "Percentage of Net Sales" (Percentage) Method

$$\text{Traditional COGS} / \text{Net Sales} = \text{Cost of Goods Sold Ratio (COGSR)}$$

$$\text{Cost} / \text{COGSR} = \text{Sales Value of Production}$$

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## Step-by-Step Guide – Page 2: Gross Sales Value of Production

BUSINESS FORM 990-B (2015) (REV. 03-15-15)			
Income And Expenses	12 Month Period Ending		Estimated For 12 Month Period Beginning
	Manufacturing	Non-Manufacturing	Manufacturing
A. Gross Receipts			
B. Deduct: Inventory at the beginning of the period			
C. Add: Inventory at the end of the period			
D. Gross Sales Value Of Production			
E. Deduct:			
1. Freight			
2. Returns And Allowances			
3. Bad Debts			
4. Charitable Contribution			
F. Net Sales			
G. Add:			
1. Other Receipts From Your Business Operations (not reported on lines 1-4)			
2. Commissions Or Fees			
3. Other Income			
H. Total Receipts			

"D" – **Gross Sales Value of Production:**  
Applies only to manufacturing risks.

This all makes sense when you remember which policy insures what:

Property/Value	CPP	BI
Raw Materials	X	
Stock In Process	X	
Cost of Finished Product	X	
Sales Value of Finished Stock Sold but not delivered	X	
Sales Value of Finished Stock not yet sold		X

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## Step-by-Step Guide – Page 2: Cost of Sales, Unrealized Income & Collection Expenses

BUSINESS INCOME STATEMENT		12 Month Period		Estimated For 12 Month Period	
INCOME AND EXPENSES		Beginning	Ending	Beginning	Ending
A. Gross Sales		Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
B. Deduct Stock Inventory at Beginning of Period					
C. Add: Period Stock Inventory at End of Period					
D. Gross Sales Value of Production					
E. Deduct:					
F. Freight, Packing, Postage and Insurance					
G. Returns and Allowances					
H. Bad Debts					
I. Collection Expenses					
J. Net Sales Value of Production					
K. Add:					
L. Other Earnings From Your Business Operations Not Reported Elsewhere					
M. Commissions or Rents					
N. Cash Discounts Received					
O. Other Income					
P. Total Revenues					

**"E" – Deduct Cost of Sales, Unrealized Income & Collection Expenses**

### Cost of Sales:

- Prepaid Freight – Outgoing
- Returns & Allowances
- Discounts

**Bad Debts.** Any spike will likely be considered a part of business income.

**Collection Expenses.** Any increase in collection expenses will likely be paid either as Business Income or as an "Extra Expense" (discussed in a later session).

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## Step-by-Step Guide – Page 2: Net Sales & Total Revenues

BUSINESS INCOME STATEMENT		12 Month Period		Estimated For 12 Month Period	
INCOME AND EXPENSES		Beginning	Ending	Beginning	Ending
A. Gross Sales		Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
B. Deduct Stock Inventory at Beginning of Period					
C. Add: Period Stock Inventory at End of Period					
D. Gross Sales Value of Production					
E. Deduct:					
F. Freight, Packing, Postage and Insurance					
G. Returns and Allowances					
H. Bad Debts					
I. Collection Expenses					
J. Net Sales Value of Production					
K. Add:					
L. Other Earnings From Your Business Operations Not Reported Elsewhere					
M. Commissions or Rents					
N. Cash Discounts Received					
O. Other Income					
P. Total Revenues					

**"F" – Net Sales / Net Sales Value of Production**

- Net Sales applies to non-manufacturing risks.
- Net Sales Value of Production applies to manufacturing risks.

**"G" – Other Earnings**

- Commissions or Rents
- Cash Discounts Received
- Other Income

Added to the amount in "F"

**"H" – Total Revenues**

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## Step-by-Step Guide – Page 3: Subtracting Expenses

BUSINESS INCOME STATEMENT		12 Month Period		Estimated For 12 Month Period	
INCOME AND EXPENSES		Beginning	Ending	Beginning	Ending
A. Gross Sales		Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
B. Deduct Stock Inventory at Beginning of Period					
C. Add: Period Stock Inventory at End of Period					
D. Gross Sales Value of Production					
E. Deduct:					
F. Freight, Packing, Postage and Insurance					
G. Returns and Allowances					
H. Bad Debts					
I. Collection Expenses					
J. Net Sales Value of Production					
K. Add:					
L. Other Earnings From Your Business Operations Not Reported Elsewhere					
M. Commissions or Rents					
N. Cash Discounts Received					
O. Other Income					
P. Total Revenues					

**Five Deductions to Arrive at 12-Month Business Income**

1. **Cost of Goods Sold:** A Required Deduction (From page 5 of Worksheet)
2. **Cost of Services Purchased and Resold** (Required Deduction if Present)
3. **Power, Heat and Refrigeration not Continuing Under Contract** (Optional Deduction if Correct Endorsement)
4. **Ordinary Payroll Expenses** (Optional, Depending on Attachment of Endorsement)
5. **Special Deductions for Mining Properties** (Page 6 of Worksheet)

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## Step-by-Step Guide – Page 5: Cost of Goods Sold

Supplemental Information	12 Month Period Ending		Estimated For 12 Month Period Beginning	
	Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
Calculation Of Cost Of Goods Sold				
Inventory At Beginning Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	1	2	1	2
Add: Cost Of Raw Stock Inventory (changes)	3	4	3	4
Cost Of Factory Supplies Consumed	5	6	5	6
Cost Of Merchandise Sold (including Transportation Charges for manufacturing sales, means cost of merchandise sold for non-manufacturing sales)	7	8	7	8
Cost Of Other Supplies Consumed	9	10	9	10
Subtotal Inventory At End Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	11	12	11	12
Cost Of Goods Sold (Other this figure is item 1, on page 3.)	13	14	13	14

Complete the Calculation for the Period Ending and the Upcoming Policy Period.

### Steps in the Process

1. **Begin w/Inventory** at beginning of the year (this excludes finished stock as broken out earlier)
2. **Add:** Cost of Raw Stock purchased during the year (Mfg.)
3. **Add:** Cost of Factory Supplies Consumed during the year (Mfg.)
4. **Add:** Cost of Merchandise Sold
5. **Add:** Cost of Other Supplies Consumed

Equals: Cost of Goods Available for Sale

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## Step-by-Step Guide – Page 5: Cost of Goods Sold

Supplemental Information	12 Month Period Ending		Estimated For 12 Month Period Beginning	
	Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
Calculation Of Cost Of Goods Sold				
Inventory At Beginning Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	1	2	1	2
Add: Cost Of Raw Stock Inventory (changes)	3	4	3	4
Cost Of Factory Supplies Consumed	5	6	5	6
Cost Of Merchandise Sold (including Transportation Charges for manufacturing sales, means cost of merchandise sold for non-manufacturing sales)	7	8	7	8
Cost Of Other Supplies Consumed	9	10	9	10
Subtotal Inventory At End Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	11	12	11	12
Cost Of Goods Sold (Other this figure is item 1, on page 3.)	13	14	13	14

From the: **Cost of Goods Available for Sale**

• **Subtract:** Inventory on Hand at the End of the Year

• **FINAL NUMBER:** **Cost of Goods Sold**

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## Step-by-Step Guide – Page 5: Cost of Goods Sold

Supplemental Information	12 Month Period Ending		Estimated For 12 Month Period Beginning	
	Manufacturing	Non-Manufacturing	Manufacturing	Non-Manufacturing
Calculation Of Cost Of Goods Sold				
Inventory At Beginning Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	1	2	1	2
Add: Cost Of Raw Stock Inventory (changes)	3	4	3	4
Cost Of Factory Supplies Consumed	5	6	5	6
Cost Of Merchandise Sold (including Transportation Charges for manufacturing sales, means cost of merchandise sold for non-manufacturing sales)	7	8	7	8
Cost Of Other Supplies Consumed	9	10	9	10
Subtotal Inventory At End Of Year (including raw materials and work in process, but not finished stock for manufacturing sales)	11	12	11	12
Cost Of Goods Sold (Other this figure is item 1, on page 3.)	13	14	13	14

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## Step-by-Step Guide – Page 3: Subtracting Expenses

Survey Item and Response	12 Months Period		Estimated for 12 Months Period	
	Non-responding	Responding	Non-responding	Responding
1. Name of the Respondent Type Respondent (e.g. Nurse)				
2. Location				
3. Date of Interview Conducted				
4. Age of Respondent (Completed) Type Respondent (e.g. Nurse and Doctor) and Age (e.g. 25 years) (e.g. Nurse, 25 years) (e.g. Doctor, 45 years)				
5. Respondent's Registration Expiry Date (e.g. 2015-2016)				
6. All Respondents Completed the Survey (e.g. Yes, No) or Partially (e.g. Yes, No)				
7. Respondent's Special Qualification for Writing the Research Paper (e.g. Yes, No)				
8. Respondent's Business Income (e.g. Yes, No)				
9. Completed the Survey as a Researcher (e.g. Yes, No)				
10. This Paper is in 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000				

### Cost of Services Purchased from Outsiders

- Required deduction (if applicable)
- Only applies to outside services billed by the insured as part of their services
- The service has to end when the when production ceases. If there is a contract requiring payment regardless of production, then this cost is NOT deducted.

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## Step-by-Step Guide – Page 3: Subtracting Expenses

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**Power, Heat and Refrigeration Expenses  
that do not continue under contract**

- An optional deduction
- Requires the attachment of the CP 15 11 endorsement
- Most commonly seen with manufacturing operations

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## Step-by-Step Guide – Page 3: Subtracting Expenses

[illegible]

**All "Ordinary Payroll" expenses or the amount of payroll expenses excluded**

- An optional deduction
- Only applies if CP 15 10 is attached
- Based on the number of days payroll being covered

**What is an "Ordinary Employee"?  
What expenses are included?**

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## Step-by-Step Guide – Page 6: Mining Properties

Supplementary Information		
Calculation Of Special Deductions – Mining Properties		
	12-Month Period Ending:	Estimated For 12-Month Period Beginning:
Royalties, Unless Specifically Included In Coverage	\$	\$
Actual Depletion, Commonly Known		
As Unit Or Cost Depletion (not percentage depletion)	+	+
Welfare And Retirement Fund	+	+
Charges Based On Tonnage	+	+
Hired Trucks	+	+
Enter This Figure In Item I On Page 5.	\$	\$

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CP 15 16 10 12

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## Calculating Coinsurance, Period of Restoration and Coverage Amounts

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## Calculating Coinsurance

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### Property Vs. BI Coinsurance

- Property coinsurance is based on the **VALUE** of the property at risk at the time of the loss
- Business income coinsurance is **solely a function of time**

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### Necessary Information

A **legitimate** estimation of the time it would take the business to return to "operational capability" following a **worst-case scenario loss** – the "Period of Restoration"

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### Calculating Coinsurance

1. Estimate the worst-case "Period of Restoration." How many months will it take to return to "operational capability" following a worst-case scenario loss?
2. Divide the worst-case period of restoration by 12 (the number of months in a year)
3. The result is the **recommended** coinsurance

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### Importance and Use of the BI Coinsurance Percentage

- The business income coinsurance percentage is NOT dependent on the amount subject to loss; it is dependent on and calculated using an accurate estimation of the "Period of Restoration."
- Once the coinsurance percentage is calculated, it can be applied to the 12-month business income exposure ("J.1" or "J.2" on the CP 15 15) to develop the limit of business income coverage needed.

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### ISO's Acceptable Coinsurance Percentage

- 50%
- 60%
- 70%
- 80%
- 90%
- 100%
- 125%

Requires calculating the "**Developed Coinsurance Percentage**" before deciding upon the "**Applied**" coinsurance percentage.

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### Example 1

Estimated "Period of Restoration"	12 months
<b>Applied Coinsurance Percentage</b> (12/12)	100%
"Estimated Loss of Income"	\$2,000,000 (Amount Subject to Loss)
Minimum BI Limit Purchased	\$2,000,000

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### Example 2

Estimated "Period of Restoration"	6 months
<b>Applied Coinsurance Percentage (6/12)</b>	50%
"Estimated Loss of Income"	\$1,000,000 (Amount Subject to Loss)
Minimum BI Limit Purchased	\$1,000,000

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### Example 3

Estimated "Period of Restoration"	9 months
<b>Applied Coinsurance Percentage (9/12)</b>	75% - Not an option, increase to 80% (maybe)
"Estimated Loss of Income"	\$1,500,000 (Amount Subject to Loss at 75%)
Minimum BI Limit Purchased	\$1,600,000 at 80% - OR...

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### Example 4

Estimated "Period of Restoration"	15 months
<b>Applied Coinsurance Percentage (15/12)</b>	125%
"Estimated Loss of Income"	\$2,500,000 (Amount Subject to Loss)
Minimum BI Limit Purchased	\$2,500,000

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### Example 5

Estimated "Period of Restoration"	18 months
<b>Applied Coinsurance Percentage</b> (18/12)	150% - not an ISO option – use 125%
"Estimated Loss of Income"	\$3,000,000 (Amount Subject to Loss)
Minimum BI Limit Purchased	\$3,000,000

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### Calculating Period of Restoration

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### Review – 4 Key Objectives During POR

- Rebuild the building or find and move into an alternative permanent location;
- Find, purchase, install and have operational new/replacement machinery or equipment;
- Replace and/or replenish stock (does not include the time necessary to replace "finished stock" in manufacturing operations); and
- Return to the same level of "operational capability" existing just prior to the loss.

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### 10 Factors Affecting the POR

1. Time to adjust the direct property loss;
2. Building plans must be drawn and approved;
3. A contractor must be found and hired;
4. The insured must apply for and wait for building permits to be issued;
5. Site preparation must be scheduled and completed, including clearing the site of damaged or destroyed property;

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### 10 Factors Affecting POR

6. Time required to rebuild (may be adversely affected by "10.");
7. Time required to restock;
8. Rehiring and hiring new employees;
9. Replacement machinery and equipment must be found, purchased, installed and made operational; and
10. Federal, state or local government may involve themselves following a loss.

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### Building Codes and the "Period of Restoration"

- The unendorsed business income policy excludes any increase in the period of restoration that results from the enforcement of ANY ordinance or law.
- Building codes (ordinances or laws) can increase the time required to complete the rebuilding process (also increases the **cost** to rebuild).

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## Building Codes and the “Period of Restoration”

- Jurisdictional enforcement of building codes fall under one of two broad categories:

- The **Jurisdictional Authority Rule**

- The **Percentage Rule**

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## Building Codes and the “Period of Restoration”

The **Jurisdictional Authority Rule**: The authority having jurisdiction decides when a structure must be brought into compliance with current building codes.

- Subjective in its application
- Jurisdictions may base this decision on some percentage of square footage damaged, the perceived safety of the undamaged part of the structure, how “out of code” the building was, or any other method that they deem reasonable

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## Building Codes and the “Period of Restoration”

The **Percentage Rule**: Buildings damaged beyond a certain percentage of their square footage or value must be brought into compliance with current building codes. When “value” is used, that’s the problem.

- Different definitions of “value”: Replacement Cost vs. Actual Cash Value vs. Market Value
- Different percentages used: Can range from 40% to 60%

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## Building Codes and the “Period of Restoration”

- Business Income policy must be endorsed to account for any increased building time attributable to an ordinance or law.
  - Attach the CP 15 31 – Ordinance or Law – Increased Period of Restoration
  - Remember to adjust the business income limits to account for this increased period of restoration
  - Endorsement covers the extended time to bring the building into compliance with applicable building codes even if the ordinance or law deals with a cause of loss not covered by the commercial property policy.

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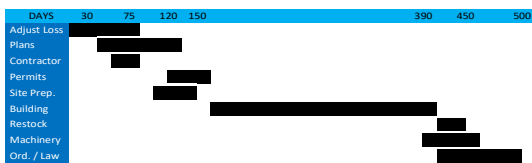
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## “Period of Restoration” Time Factors

The 10 period of restoration factors are not necessarily linear or in order of importance.

Several steps may be able to be accomplished simultaneously.



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## Calculating Coverage Amounts

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### “Insurable” Business Income

- A function of:
  - The revenues and expenses contemplated in the CP 15 15; and
  - The worst-case period of restoration
- Remember, only specific sales-related expenses and production-related expenses are contemplated when creating the Business Income Report/Work Sheet

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### “Compensable” Business Income

- The actual amount of business income paid to cover the amount of income lost during the period of restoration.
- This is the amount necessary to indemnify the insured.
- Based on net profit or loss before tax plus continuing normal and **ongoing** (continuing) operating expenses incurred during the period of restoration.

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### Key Questions

- How much difference between these amounts?
- When might the difference be noticeable?
- What can be done to adjust for the difference?
- What are the benefits of the difference?

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## Extended Business Income

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### Loss of Income After Re-Opening

- When do "business income" payments end?
- What happens to customers/clients during a shut down?
- How long will it take the insured to return to pre-loss operational income?
- How does the insured secure payment for this additional income loss?

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### BI Payments End

Business income payouts end once the insured has returned to "operational capability" meaning they have reached the end of the "period of restoration."

The BI policy states that the "period of restoration"

*Ends on the earlier of:*

- (1) The date when the property at the described premises should be repaired, rebuilt or replaced with reasonable speed and similar quality; or
- (2) The date when business is resumed at a new permanent location.

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### What Happens During Shut Down

- Retail customers find other stores
- Service operation customers create new habits
- Those within the manufacturing process enter new contracts and find alternative buyers and/or suppliers

**Result: Although the insured has returned to full "operational capability," it may not return to pre-loss operational income levels for a long time.**

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### Result: Two Loss Periods



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### Returning to Pre-Loss Income Levels

How long will it take to return to pre-loss income levels?

#### **Depends on the operation!**

- Retail operations may have a relatively short return time
- Restaurants and others may require a few months
- Manufacturing operations and any operation on a production schedule or operating under contracts may require a year or longer

#### **Depends on the market conditions!**

- Entire area may have been subject to a catastrophe
- Economic conditions may be poor
- Loss due to market conditions is NOT covered by the policy or any standard endorsement!

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## Securing Payment for Additional Income Lost

Unendorsed business income policies provide a limited amount of coverage under **Additional Coverage 5.c**. Coverage is limited to the earliest of:

- The insureds return to pre-loss operational income levels; or
- 60 consecutive days

If this length of coverage is not enough, the insured must:

- Decide how long coverage is needed;
- Calculate how much additional coverage is needed; and
- Include that amount on the CP 15 15 (K.2).

There is no endorsement required; a box must be checked on the application specifying the number of days coverage desired.

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## Where does the Money Come From for the First/Automatic 60 Days

- What's Paid: The difference between what **IS** made and what would have been made had there been no loss or damage.
- The amount paid is based on the definition of "business income."
- Does the insured need to increase the business income limit to cover this initial 60 days? The answer is found in the difference between "**insurable business income**" and "**compensable business income**."

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## When 60 Days Isn't Enough

### Options available:

- |            |            |            |
|------------|------------|------------|
| • 90 Days  | • 120 Days | • 150 Days |
| • 180 Days | • 270 Days | • 365 Days |
| • 450 Days | • 540 Days | • 630 Days |
|            | • 730 Days |            |

### Calculate the estimated amount of coverage needed:

$(12 \text{ mos. BI exposure} / 365) \times (\text{Total Number of Days} - 60) = \text{Amount}$   
 $(\$1,387,000 / 365) \times (180 - 60) = \text{\$456,000}$  (place on K.2.)

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## Limitations

- Cannot be used with the Maximum Period of Indemnity
- Cannot be used if coverage is written on a no-coinsurance basis. This is not the same as a non-coinsurance option, just that no coinsurance percentage is being applied.
- This option not available for extra expense protection

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## Dependent Property Coverage (Contingent Business Income)

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## Dependent Properties, Or...



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### ...Contingent Business Income

Assume for a moment that you work in the risk management department at General Motors. You find out that the three most popular colors for the Corvette (representing 52% of your total 2017 model year Corvette sales) are manufactured in only **one** place in the world.

*Question: Do you think GM has a potential problem?*

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### The Dependent Property Exposure

- Business Income covers loss of business income when a covered cause of loss damages an insured location resulting in a suspension of operations.
- Damage to dependent properties is **NOT** covered by the unendorsed Business Income Coverage Form.
- What constitutes a "dependent property?"

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### What is a "Dependent Property"

- An external property or operation necessary for the continued viability of the insured.
- It's not limited to mutual beneficiaries.

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## Where to Find Dependent Properties

1. "Suppliers" (Contributing Location)
2. "Buyers" (Recipient Location)
3. "Providers" (Manufacturing Location)
4. "Drivers" (Leader Location)

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## "Suppliers"

- Contributing Location per ISO
- Supply the insured with parts, raw materials or services
- May be sole or major source of material
- If this source cannot supply the necessary material, what happens to the insured?
- Water, power and communication service providers are not within the definition of a "supplier" (This exposure requires a separate endorsement – "Utility Services-Time Element CP 15 45")

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## "Buyers"

- Recipient Location per ISO
- Buys or accepts the products or goods of the insured
- How much of the manufactured product is bought by a particular "buyer?"
- Contracts can play a part

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### “Providers”

- Manufacturing Location per ISO
- Not a location owned by the insured
- Acts as the manufacturer FOR the insured

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### “Drivers”

- Leader Locations per ISO
- Exclusively beneficial to the insured
- Anchor stores
- Sporting events
- Major attractions (convention centers, casinos, etc.)
- Essentially, what drives customers to the insured’s location

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### Dependent Property Coverage by Endorsement

- Business Income from Dependent Properties – Limited International Coverage (CP 15 01)
- Extra Expense from Dependent Properties – Limited International Coverage (CP 15 02)
- Business Income from Dependent Properties – Broad Form (CP 15 08)
- Business Income from Dependent Properties – Limited Form (CP 15 09)
- Extra Expense from Dependent Properties (CP 15 34)

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## Policy Provisions

Applicable to all five dependent property endorsements

- No coverage if the loss leading to the dependent property shutdown is limited to the damage or destruction of electronic data
- "Business income" and "extra expense" are defined the same in these forms
- "Period of restoration" carries the same definition – *Beginning 72 hours (or whatever endorsed to) after the loss and ending when the property SHOULD be repaired, rebuilt or replaced with reasonable speed.*
- To be covered, the loss causing the dependent property's shut down must be one that would be covered if it occurred to the insured's property.

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## Policy Provisions

Applicable to the Broad Form (CP 15 08) and the Limited Form (CP 15 09) – *Remember, this is domestic coverage*

- The dependent property business income loss will be reduced if (*and when*) the insured can find another "buyer" or "supplier"

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