

January 22, 2015

Mr. David M. Williams, Plan Administrator West Palm Beach Police Pension Fund 2100 N. Florida Mango Road West Palm Beach, Florida 33409

Re:

West Palm Beach Police Pension Fund GASB No. 67 Disclosure Information

Dear Dave:

As requested, we have prepared the actuarial disclosure information required under Governmental Accounting Standards Board (GASB) Statement Number 67 for the fiscal year ending September 30, 2014. Enclosed are the following exhibits:

- Calculation of the single discount rate (for auditor demonstrations) based on projections of benefit payments, expected contributions and investment returns
- Statement of changes in Net Pension Liability and Ratios, using the single discount rate as determined above
- Schedule of Net Pension Liability
- Schedule of Contributions
- Notes to Schedule of Contributions
- Sensitivity analysis

Please note that our calculations reflect a prepaid contribution of \$1,110,113 as of September 30, 2014 which was not reflected on the financial statements. It is our understanding that the Chapter 185 revenue received in 2014 will be used to offset the City's required contribution for the fiscal year ending September 30, 2015.

The actuarial valuation of the liabilities has been determined as of the beginning of the year, October 1, 2013, and "rolled forward" to the measurement date, September 30, 2014. Using the beginning of the year valuation of liabilities allows for more timely reporting at the end of the year. If significant changes occur during the year, such as benefit changes or changes in assumptions or methods, these may need to be reflected in the process.

The enclosed exhibits were based upon draft financial information as of September 30, 2014, which was furnished by the Plan Administrator and auditor. If any of this information changes during the auditing process, then these exhibits will need to be revised.

Please note that there are other items not listed above that will be required in the in the Plan's financial statements and/or the City's Comprehensive Annual Financial Report (CAFR) to fully comply with GASB No. 67 standards. This additional information will need to be provided by the Plans' investment consultants, accountants or other financial statement preparers.

Mr. David M. Williams January 22, 2015 Page 2

Required Disclosures

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by them. This report may be provided to parties other than the Retirement System only in its entirety and only with their permission. This report should not be relied on for any purpose other than the purpose described above.

The calculations in this report are based on financial information as of September 30, 2014 as well as information furnished by the Plan Administrator for the October 1, 2013 Actuarial Valuation concerning plan provisions, active members, terminated members, retirees and beneficiaries. We reviewed this information for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator and auditor.

They are also based on the assumptions, methods, and plan provisions outlined in this report. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of the report prior to relying on information in the report.

The undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The undersigned actuaries are independent of the plan sponsor.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

We welcome your questions and comments.

Sincerely yours,

Jeffrey Amrose, EA, MAAA Senior Consultant & Actuary Trisha Amrose, EA, MAAA Consultant & Actuary

JA/ta

Enclosures

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS GASB Statement No. 67

Fiscal year ending September 30,	2014
Total pension liability	
Service Cost	\$ 3,553,404
Interest	22,792,357
Benefit Changes	-
Difference between actual & expected experience	294,048
Assumption Changes	-
Benefit Payments	(13,557,996)
Refunds	(168,503)
Other (DROP and Share Plan Adjustments)	 84,844
Net Change in Total Pension Liability	12,998,154
Total Pension Liability - Beginning	 289,948,599
Total Pension Liability - Ending (a)	\$ 302,946,753
Plan Fiduciary Net Position	
Contributions - Employer	\$ 8,941,538
Contributions - Non-Employer Contributing Entity	-
Contributions - Member	1,927,618
Net Investment Income	22,389,189
Benefit Payments	(13,557,996)
Refunds	(168,503)
Administrative Expense	(337,907)
Other	 370,252
Net Change in Plan Fiduciary Net Position	19,564,191
Plan Fiduciary Net Position - Beginning	 238,502,690
Plan Fiduciary Net Position - Ending (b)	\$ 258,066,881
Net Pension Liability - Ending (a) - (b)	44,879,872
Plan Fiduciary Net Position as a Percentage	
of Total Pension Liability	85.19 %
Covered Employee Payroll*	\$ 17,446,782
Net Pension Liability as a Percentage	
of Covered Employee Payroll	257.24 %

^{*} Actual total covered payroll for the fiscal year ending September 30, 2014.

SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY GASB Statement No. 67

	Total			Plan Net Position		Net Pension Liability
FY Ending	Pension	Plan Net	Net Pension	as a % of Total	Covered	as a % of
September 30,	Liability	Position	Liability	Pension Liability	Payroll*	Covered Payroll
2014	\$302,946,753	\$258,066,881	\$ 44,879,872	85.19%	\$ 17,446,782	257.24%

^{*} Actual total covered payroll for the fiscal year ending September 30, 2014.

SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

	Actuarially		Contribution		Actual Contribution
FY Ending	Determined	Actual	Deficiency	Covered	as a % of
September 30,	Contribution	Contribution	(Excess)	Payroll*	Covered Payroll
2014	\$ 8,941,538	\$ 8,941,538	\$ -	\$ 17,446,782	51.25%

^{*} Actual total covered payroll for the fiscal year ending September 30, 2014.

NOTES TO SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

Valuation Date: September 30, 2013

Notes Actuarially determined contribution rates are calculated as of October 1,

which is two year(s) prior to the end of the fiscal year in which

contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Normal
Amortization Method Level Dollar, Closed

Remaining Amortization Period 30 years

Asset Valuation Method 4-year smoothed market

Inflation 3.0%

Salary Increases 5.0%, including inflation

Investment Rate of Return 8.0%

Retirement Age Experience-based table of rates that are specific to the type of eligibility

condition

Mortality 60% recognition of the RP-2000 Combined Healthy Participant Mortality

Table for males and females with mortality improvement projected using Scale AA after 2000 and 40% recognition of the 1983 Group Annuity Mortality Table for males and females with no future mortality

improvements

Other Information:

Notes See Section A in the September 30, 2013 Actuarial Valuation Report

SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 8.00% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 8.00%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (8.00%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 8.00%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

Current Single Discount								
1% Decrease Rate Assumption 1% Increase								
7.00%			8.00%		9.00%			
\$	72,963,033	\$	44.879.872	\$	21,751,793			

GASB 67 – Projection of Contributions Single Discount Rate Determination: 50-Year

Year	Payroll for Current Employees	Contributions from Current Employees	Service Cost and Expense Contributions	UAL Contributions	Total Contributions
	(a)	(b)	(c)	(d)	(e)=(b)+(c)+(d)
0	\$ 16,819,221	(0)	(0)	(0)	(6) (6) (6) (6)
1	17,316,782	\$ 1,832,939	\$ 2,016,753	\$ 6,691,602	\$ 10,541,293
2	17,505,143	1,852,876	2,039,963	6,691,600	10,584,439
3	17,694,243	1,872,892	2,062,174	6,691,600	10,626,666
4	17,785,632	1,882,566	2,072,109	6,691,600	10,646,274
5	17,777,092	1,881,662	2,069,262	6,691,600	10,642,523
6	17,470,495	1,849,209	2,030,263	6,691,600	10,571,072
7	16,854,334	1,783,990	1,953,774	6,691,600	10,429,363
8	16,018,619	1,695,532	1,851,405	6,691,600	10,238,536
9	14,938,924	1,581,249	1,717,167	6,691,600	9,990,015
10	13,762,697	1,456,748	1,572,637	6,691,600	9,720,985
11	12,642,072	1,338,132	1,437,590	6,691,600	9,467,322
12	11,577,921	1,225,495	1,313,529	6,691,600	9,230,624
13	10,527,223	1,114,281	1,191,296	4,559,402	6,864,979
14	9,431,985	998,352	1,061,742	(767,294)	1,292,800
15	8,330,054	881,716	932,416	(767,294)	1,046,837
16	7,417,982	785,175	825,245	(767,294)	843,126
17	6,596,801	698,255	729,041	(767,294)	660,002
18	5,707,749	604,151	625,156	(767,294)	462,013
19	4,717,523	499,338	512,563	(767,294)	244,607
20	3,695,940	391,206	399,165	(1,126,546)	(336,174)
21	2,794,955	295,839	300,065	463,024	1,058,928
22	2,069,019	219,001	221,346	463,024	903,370
23	1,380,908	146,166	147,377	463,024	756,567
24	839,573	88,867	89,736	463,024	641,627
25	496,619	52,566	53,192	463,024	568,782
26	276,737	29,292	29,783	463,024	522,099
27	130,175	13,779	14,124	463,024	490,926
28	52,135	5,518	5,699	463,024	474,241
29	16,070	1,701	1,707	463,024	466,432
30	-	-	-	312,356	312,356
31	-	-	-	-	-
32	-	-	-	-	-
33	-	-	-	-	-
34	-	-	-	-	-
35	-	-	-	-	-
36	-	-	-	-	-
37	-	-	-	-	-
38	-	-	-	-	-
39	-	-	-	-	-
40	-	-	-	-	-
41	-	-	-	-	-
42	-	-	-	-	-
43	-	-	-	-	-
44	-	-	-	-	-
45	-	-	-	-	-
46	-	-	-	-	-
47	-	-	-	-	-
48	-	-	-	-	-
49	-	-	-	-	-
50	-	-	-	-	-

GASB 67 Single Discount Rate Determination: 100-Year Projection of Cash Flows

	Projected Beginning	Projected Total	Projected Benefit	Projected Administrative	Projected Investment Earnings at	Projected Ending Plan
Year	Plan Net Position	Contributions	Payments	Expenses	8.00%	Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 157,923,884	\$ 10,541,293	\$ 12,256,886	\$ 208,755	\$ 12,558,418	\$ 168,557,953
2	168,557,953	10,584,439	12,517,173	211,026	13,400,535	179,814,728
3	179,814,728	10,626,666	12,803,905	213,305	14,291,396	191,715,580
4	191,715,580	10,646,274	13,121,925	214,407	15,231,714	204,257,236
5	204,257,236	10,642,523	13,575,071	214,304	16,217,126	217,327,511
6	217,327,511	10,571,072	14,224,076	210,608	17,234,630	230,698,529
7	230,698,529	10,429,363	15,032,420	203,180	18,267,331	244,159,623
8	244,159,623	10,238,536	16,001,252	193,106	19,299,120	257,502,922
9	257,502,922	9,990,015	17,048,667	180,090	20,316,254	270,580,434
10	270,580,434	9,720,985	18,179,777	165,910	21,308,084	283,263,816
11	283,263,816	9,467,322	19,268,667	152,401	22,270,615	295,580,685
12	295,580,685	9,230,624	20,286,136	139,573	23,207,266	307,592,866
13	307,592,866	6,864,979	21,256,069	126,907	24,037,881	317,112,751
14	317,112,751	1,292,800	22,230,802	113,703	24,543,151	320,604,197
15	320,604,197	1,046,837	23,170,172	100,420	24,776,487	323,156,930
16	323,156,930	843,126	23,959,292	89,425	24,942,188	324,893,527
17	324,893,527	660,002	24,662,713	79,525	25,046,724	325,858,015
18	325,858,015	462,013	25,377,397	68,807	25,088,499	325,962,323
19	325,962,323	244,607	26,128,948	56,870	25,059,300	325,080,412
20	325,080,412	(336,174)	26,866,460	44,555	24,937,513	322,770,736
21	322,770,736	1,058,928	27,486,610	33,693	24,783,566	321,092,927
22	321,092,927	903,370	27,985,312	24,943	24,624,018	318,610,060
23	318,610,060	756,567	28,439,573	16,647	24,402,134	315,312,540
24	315,312,540	641,627	28,762,450	10,121	24,121,413	311,303,009
25	311,303,009	568,782	28,921,164	5,987	23,791,728	306,736,368
26	306,736,368	522,099	28,967,612	3,336	23,422,847	301,710,367
27	301,710,367	490,926	28,932,477	1,569	23,020,992	296,288,239
28	296,288,239	474,241	28,821,888	629	22,590,943	290,530,906
29	290,530,906	466,432	28,667,638	193	22,136,118	284,465,624
30	284,465,624	312,356	28,478,112	-	21,652,294	277,952,163
31	277,952,163	=	28,250,616	=	21,127,888	270,829,435
32	270,829,435	-	27,993,295	-	20,568,164	263,404,304
33	263,404,304	-	27,702,495	-	19,985,562	255,687,371
34	255,687,371	-	27,381,062	-	19,380,817	247,687,126
35	247,687,126	-	27,032,249	-	18,754,482	239,409,359
36	239,409,359	-	26,648,926	-	18,107,298	230,867,731
37	230,867,731	-	26,228,567	=	17,440,459	222,079,623
38	222,079,623	-	25,770,732	-	16,755,372	213,064,263
39	213,064,263	-	25,271,442	-	16,053,730	203,846,552
40	203,846,552	-	24,730,512	-	15,337,534	194,453,574
41	194,453,574	-	24,147,136	=	14,608,982	184,915,420
42	184,915,420	-	23,519,997	-	13,870,533	175,265,956
43	175,265,956	-	22,847,237	-	13,124,968	165,543,687
44	165,543,687	-	22,130,043	-	12,375,323	155,788,966
45	155,788,966	-	21,369,083	-	11,624,798	146,044,682
46	146,044,682	-	20,564,881	-	10,876,804	136,356,605
47	136,356,605	-	19,719,465	-	10,134,924	126,772,064
48	126,772,064	-	18,836,274	-	9,402,809	117,338,600
49	117,338,600	-	17,919,122	-	8,684,112	108,103,589
50	108,103,589	-	16,972,645	-	7,982,442	99,113,386

GASB 67 Single Discount Rate Determination: 100-Year Projection of Cash Flows (cont'd)

51	99,113,386	-	16,002,079	-	7,301,302	90,412,609
52	90,412,609	-	15,014,053	-	6,644,000	82,042,556
53	82,042,556	-	14,015,707	-	6,013,562	74,040,410
54	74,040,410	-	13,014,205	-	5,412,679	66,438,885
55	66,438,885	-	12,018,093	-	4,843,635	59,264,427
56	59,264,427	-	11,035,917	-	4,308,210	52,536,720
57	52,536,720	-	10,074,404	-	3,807,714	46,270,030
58	46,270,030	-	9,140,254	-	3,343,026	40,472,802
59	40,472,802	-	8,239,839	-	2,914,571	35,147,534
60	35,147,534	-	7,378,036	-	2,522,359	30,291,857
61	30,291,857	-	6,558,867	-	2,166,041	25,899,031
62	25,899,031	-	5,785,651	-	1,844,949	21,958,329
63	21,958,329	-	5,061,772	-	1,558,091	18,454,648
64	18,454,648	-	4,390,313	-	1,304,138	15,368,473
65	15,368,473	-	3,772,778	-	1,081,470	12,677,165
66	12,677,165	-	3,210,574	-	888,221	10,354,812
67	10,354,812	-	2,704,833	-	722,273	8,372,252
68	8,372,252	-	2,254,885	-	581,320	6,698,687
69	6,698,687	-	1,859,147	-	462,960	5,302,500
70	5,302,500	-	1,515,534	-	364,745	4,151,710
71	4,151,710	-	1,221,175	-	284,230	3,214,764
72	3,214,764	-	972,728	-	219,021	2,461,056
73	2,461,056	-	765,772	-	166,843	1,862,127
74	1,862,127	-	595,468	-	125,610	1,392,268
75	1,392,268	-	457,492	-	93,434	1,028,210
76	1,028,210	-	347,414	-	68,628	749,424
77	749,424	-	260,530	-	49,733	538,627
78	538,627	-	192,688	-	35,531	381,470
79	381,470	-	140,478	-	25,007	265,999
80	265,999	-	100,916	-	17,321	182,404
81	182,404	-	71,344	-	11,793	122,853
82	122,853	-	49,554	-	7,884	81,184
83	81,184	-	33,784	-	5,169	52,569
84	52,569	-	22,568	-	3,320	33,321
85	33,321	-	14,751	-	2,087	20,657
86	20,657	-	9,418	-	1,283	12,522
87	12,522	-	5,861	-	772	7,433
88	7,433	-	3,568	-	455	4,319
89	4,319	-	2,123	-	262	2,458
90	2,458	-	1,237	-	148	1,370
91	1,370	-	708	-	82	743
92	743	-	400	-	44	387
93	387	-	221	-	22	188
94	188	-	122	-	10	76
95	76	-	53	-	4	28
96	28	-	22	-	1	7
97	7	-	7	-	0	1
98	1	-	1	-	0	-
99	-	-	-	-	-	-
100	-	-	-	-	-	-

GASB 67 Single Discount Rate Determination: 100-Year Projection to Determine Cross-over Date

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=((c)/(1+sdr)^(a5)
1	\$ 157,923,884	, ,	\$ 12,256,886	* *	\$ 11,794,195	\$ -	\$ 11,794,195
2	168,557,953	12,517,173	12,517,173	<u>-</u>	11,152,459	_	11,152,459
3	179,814,728	12,803,905	12,803,905	_	10,562,897	-	10,562,897
4	191,715,580	13,121,925	13,121,925	_	10,023,385	-	10,023,385
5	204,257,236	13,575,071	13,575,071	_	9,601,414	-	9,601,414
6	217,327,511	14,224,076	14,224,076	_	9,315,226	-	9,315,226
7	230,698,529	15,032,420	15,032,420	_	9,115,374	-	9,115,374
8	244,159,623	16,001,252	16,001,252	_	8,984,125	-	8,984,125
9	257,502,922	17,048,667	17,048,667	_	8,863,158	-	8,863,158
10	270,580,434	18,179,777	18,179,777	_	8,751,104	-	8,751,104
11	283,263,816	19,268,667	19,268,667	_	8,588,202	-	8,588,202
12	295,580,685	20,286,136	20,286,136	_	8,371,941	_	8,371,941
13	307,592,866	21,256,069	21,256,069	_	8,122,431	-	8,122,431
14	317,112,751	22,230,802	22,230,802	_	7,865,646	_	7,865,646
15	320,604,197	23,170,172	23,170,172	_	7,590,752	-	7,590,752
16	323,156,930	23,959,292	23,959,292	_	7,267,847	-	7,267,847
17	324,893,527	24,662,713	24,662,713	_	6,927,059	-	6,927,059
18	325,858,015	25,377,397	25,377,397	_	6,599,809	-	6,599,809
19	325,962,323	26,128,948	26,128,948	_	6,291,909	-	6,291,909
20	325,080,412	26,866,460	26,866,460	_	5,990,281	-	5,990,281
21	322,770,736	27,486,610	27,486,610	_	5,674,586	-	5,674,586
22	321,092,927	27,985,312	27,985,312	_	5,349,577	-	5,349,577
23	318,610,060	28,439,573	28,439,573	_	5,033,714	-	5,033,714
24	315,312,540	28,762,450	28,762,450	_	4,713,762	-	4,713,762
25	311,303,009	28,921,164	28,921,164	_	4,388,678	-	4,388,678
26	306,736,368	28,967,612	28,967,612	_	4,070,117	-	4,070,117
27	301,710,367	28,932,477	28,932,477	_	3,764,056	_	3,764,056
28	296,288,239	28,821,888	28,821,888	_	3,471,916	_	3,471,916
29	290,530,906	28,667,638	28,667,638	_	3,197,532	_	3,197,532
30	284,465,624	28,478,112	28,478,112	_	2,941,104	_	2,941,104
31	277,952,163	28,250,616	28,250,616	_	2,701,490	_	2,701,490
32	270,829,435	27,993,295	27,993,295	_	2,478,596	_	2,478,596
33	263,404,304	27,702,495	27,702,495	_	2,271,155	_	2,271,155
34	255,687,371	27,381,062	27,381,062	_	2,078,521	_	2,078,521
35	247,687,126	27,032,249	27,032,249	_	1,900,039	-	1,900,039
36	239,409,359	26,648,926	26,648,926	_	1,734,349	-	1,734,349
37	230,867,731	26,228,567	26,228,567	_	1,580,547	_	1,580,547
38	222,079,623	25,770,732	25,770,732	_	1,437,924	-	1,437,924
39	213,064,263	25,271,442	25,271,442	_	1,305,616	-	1,305,616
40	203,846,552	24,730,512	24,730,512	_	1,183,027	-	1,183,027
41	194,453,574	24,147,136	24,147,136	_	1,069,556	-	1,069,556
42	184,915,420	23,519,997	23,519,997	_	964,609	_	964,609
43	175,265,956	22,847,237	22,847,237	_	867,609	-	867,609
44	165,543,687	22,130,043	22,130,043	-	778,124	-	778,124
45	155,788,966	21,369,083	21,369,083	-	695,711	-	695,711
46	146,044,682	20,564,881	20,564,881	-	619,934	-	619,934
47	136,356,605	19,719,465	19,719,465	-	550,415	-	550,415
48	126,772,064	18,836,274	18,836,274	-	486,818	_	486,818
49	117,338,600	17,919,122	17,919,122	-	428,810	_	428,810
	,555,500	, ,	, ,		.20,010		.20,010

GASB 67 Single Discount Rate Determination: 100-Year Projection to Determine Cross-over Date (cont'd)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)5)	(g)=(e)*vf ^((a)5)	(h)=((c)/(1+sdr)^(a5)
51	\$ 99,113,386	\$ 16,002,079	\$ 16,002,079	\$ -	\$ 328,304	(g)_(e) · vi · ((a)3)	\$ 328,304
52	90,412,609	15,014,053	15,014,053	φ - -	285,216	φ -	285,216
53	82,042,556	14,015,707	14,015,707	-	246,529	-	246,529
54	74,040,410	13,014,205	13,014,205	-	211,956	-	211,956
55	66,438,885	12,018,093	12,018,093	-	181,235	-	181,235
56	59,264,427	11,035,917	11,035,917	-	154,096	-	154,096
57		10,074,404	10,074,404	-	130,250	-	130,250
58	52,536,720 46,270,030	9,140,254	9,140,254	-	109,419	-	109,419
59	40,472,802		8,239,839	-	91,333	-	91,333
60	35,147,534	8,239,839 7,378,036	7,378,036	-	75,723	-	75,723
61	30,291,857	6,558,867	6,558,867	-	62,329	-	62,329
62	25,899,031	5,785,651	5,785,651	-	50,909	-	50,909
63	21,958,329	5,061,772	5,061,772	-	41,240	_	41,240
64	18,454,648	4,390,313	4,390,313	-	33,120	-	33,120
65	15,368,473	3,772,778	3,772,778	-	26,353	-	26,353
66	12,677,165	3,210,574	3,210,574	-	20,765	-	20,765
67	10,354,812	2,704,833	2,704,833	-	16,198	-	16,198
				-		-	
68 69	8,372,252	2,254,885	2,254,885 1,859,147	-	12,503	-	12,503
70	6,698,687	1,859,147		-	9,545	-	9,545 7,205
	5,302,500	1,515,534	1,515,534	-	7,205	-	7,205
71	4,151,710	1,221,175	1,221,175 972,728	-	5,375	-	5,375
72	3,214,764	972,728	· · · · · · · · · · · · · · · · · · ·	-	3,965	-	3,965
73	2,461,056	765,772	765,772	-	2,890	-	2,890
74 75	1,862,127	595,468	595,468	-	2,081	-	2,081
75 76	1,392,268	457,492	457,492	-	1,480	-	1,480
76	1,028,210	347,414	347,414	-	1,041	-	1,041
77	749,424	260,530	260,530	-	723	-	723
78 79	538,627	192,688	192,688	-	495 334	-	495
80	381,470 265,999	140,478	140,478	-	222	-	334
80 81		100,916	100,916	-		-	222
	182,404	71,344	71,344	-	145	-	145
82 83	122,853	49,554	49,554	-	94 59	-	94 59
83 84	81,184	33,784	33,784	-	37	-	37
84 85	52,569	22,568	22,568	-	22	-	22
85 86	33,321	14,751	14,751	-	13	-	13
86 87	20,657	9,418	9,418	-	8	-	8
	12,522	5,861	5,861	-		-	
88	7,433	3,568	3,568	-	4	-	4
89 90	4,319	2,123	2,123	-	2	-	2
	2,458	1,237	1,237	-	1	-	1
91	1,370 743	708	708 400	-	1	-	1
92		400		-	0	-	0
93	387	221	221	-	0	-	0
94	188	122	122	-	0	-	0
95	76	53	53	-	0	-	0
96	28	22	22	-	0	-	0
97	7	7	7	-	0	-	0
98	1	1	1	-	0	-	0
99	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-

