

# CMMI® for SCAMPI<sup>SM</sup> Class A Appraisal Results 2011 End-Year Update

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March 2012



**Software Engineering Institute**

**Carnegie Mellon**

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# Outline

Introduction

Current Status

Community Trends

Organizational Trends

Summary and Terms Used in this Briefing

This briefing is based solely on the appraisals reported to the SEI. It cannot be used as a source for an exact indicator of all organizations in the world using CMMI models or appraisal methods nor can it be used for certification or verification purposes.

The SEI does not certify appraisal results or organizations. The SEI licenses SEI Partners, authorizes/certifies lead appraisers, team leaders and high maturity lead appraisers to conduct appraisals. Neither the SEI nor any other organization is a “certifying authority” of the results from a SCAMPI appraisal. Therefore requests to the SEI to provide information to be used for this purpose can not be fulfilled. Information provided by the SEI, such as this briefing, is to demonstrate reported results of the use of CMMI products and services only.



# Introduction - Purpose

Characterize the adoption of CMMI

Describe results from Standard CMMI Appraisal Method for Process Improvement (SCAMPI<sup>SM</sup>) v1.2/v1.3 Class A appraisals using Capability Maturity Model<sup>®</sup> Integration (CMMI v1.2/ v1.3)\*

- \* Organizations previously appraised against CMMI v1.0 /v1.1 and which have not reappraised against v1.2 or v1.3 are not included in this report.
- \* SVC,ACQ appraisals are included in this report, P-CMM appraisals are not included in this report,



# Introduction - Briefing Contents

This briefing includes three primary sections:

## 1. Current Status

- Snapshot of the reporting organizations based on the most recent appraisals, since the release of SCAMPI V1.2

## 2. Community Trends

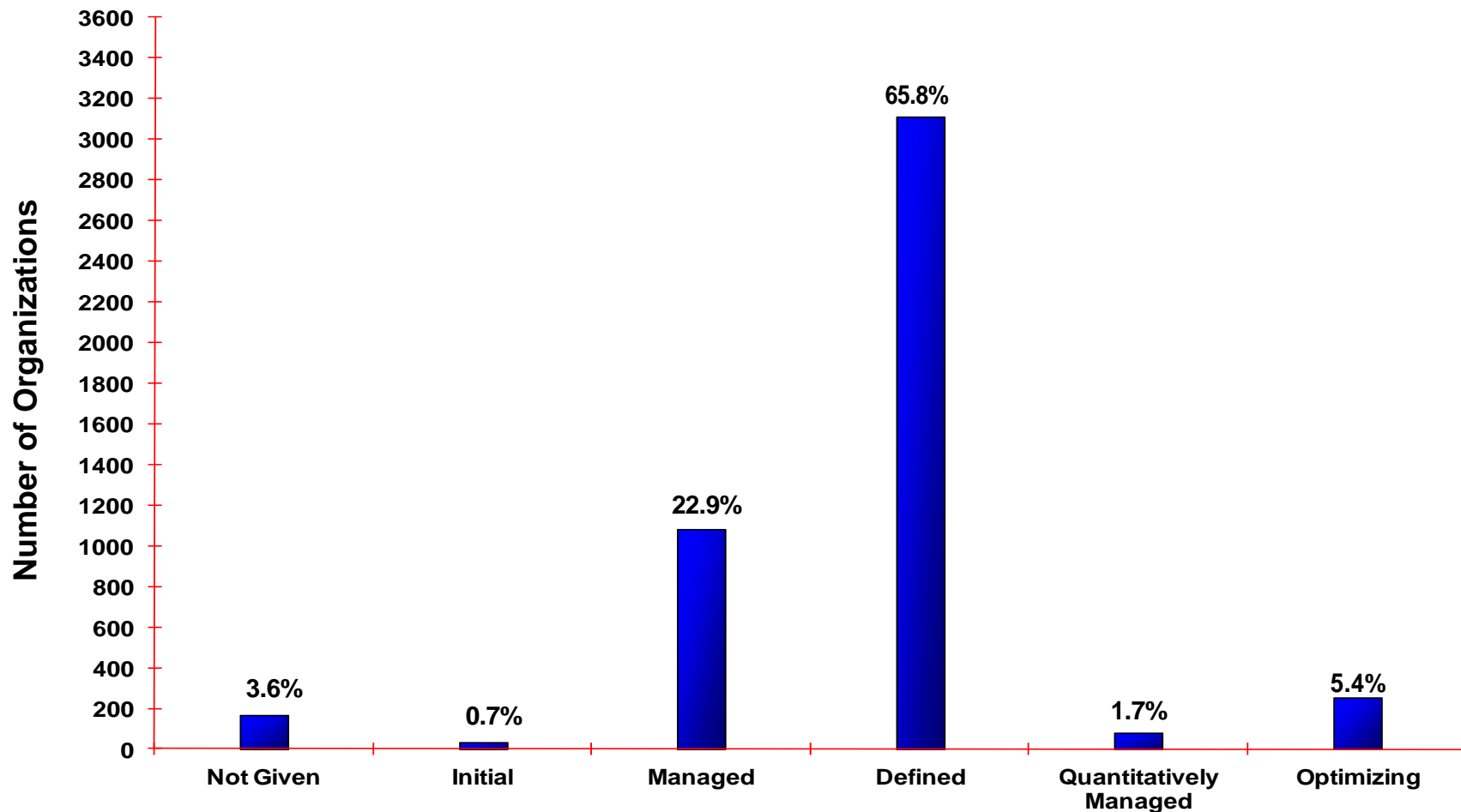
- Changes in the global distribution of appraisals
- Growth in the number of appraisals performed
- Shifts in the maturity profile over time

## 3. Organizational Trends

- Time to move up in maturity based on change in maturity level and time between appraisals



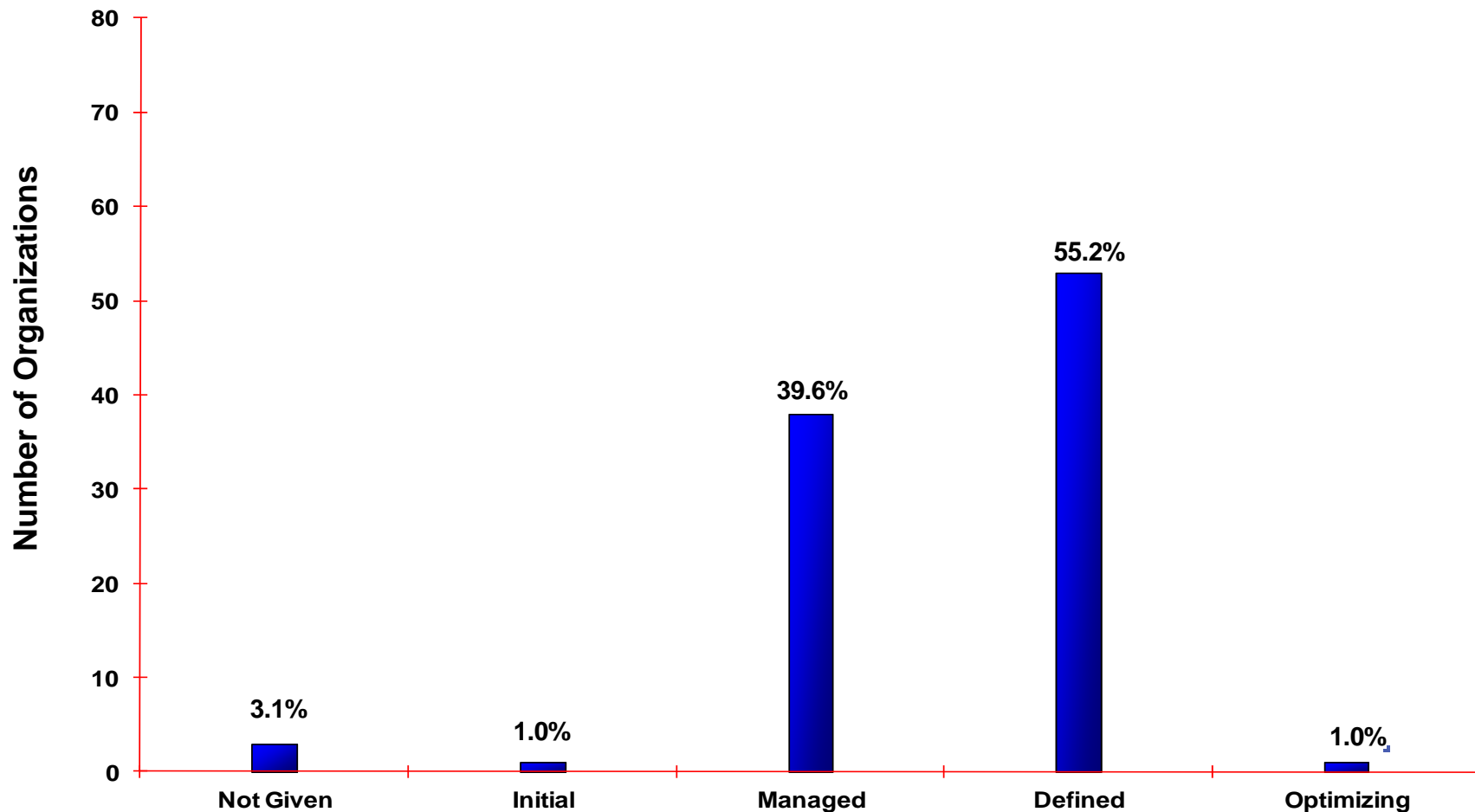
# Process Maturity Profile by All Reporting Organizations



Based on most recent appraisal of 4731 organizations



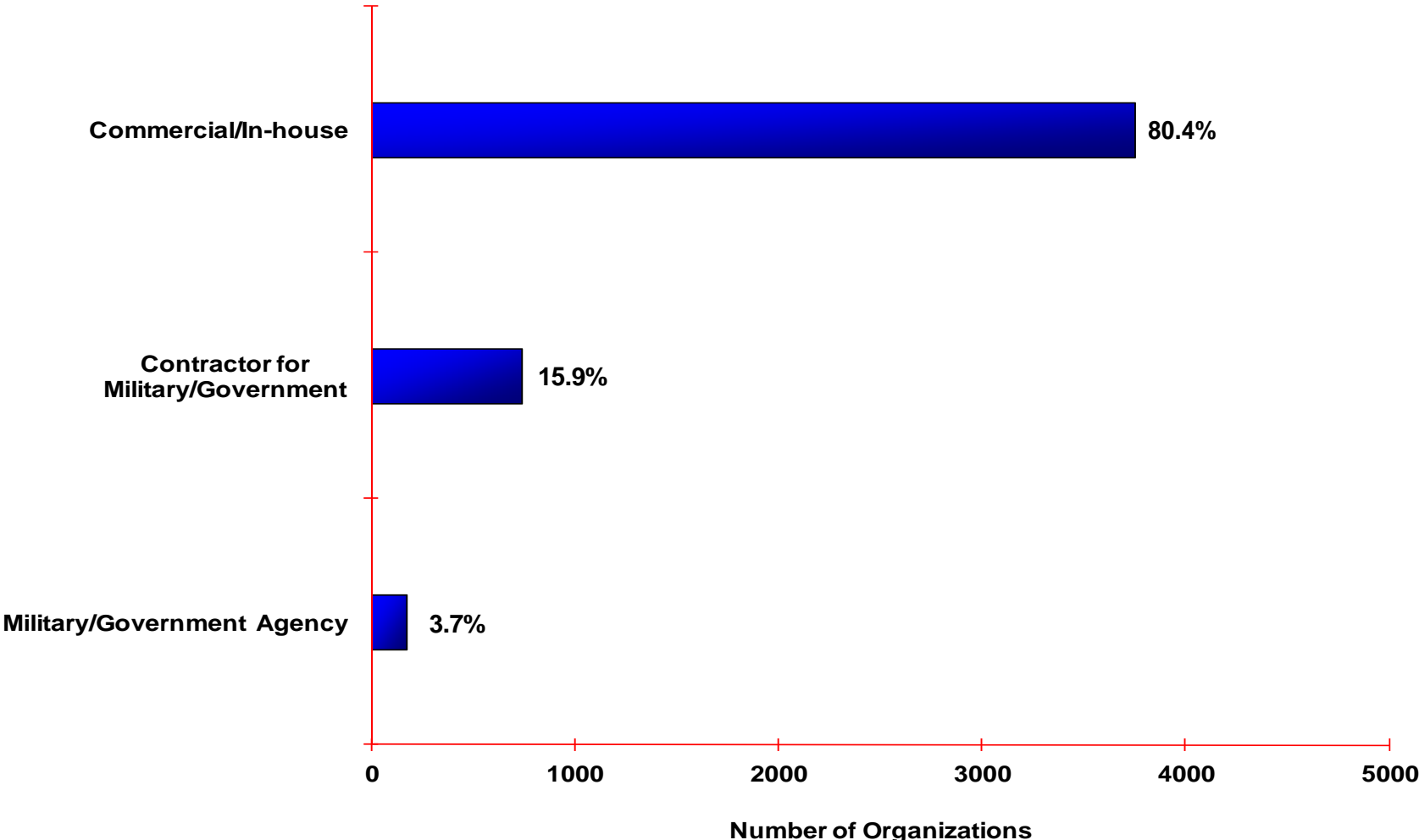
# Process Maturity Profile (SVC Only) by All Reporting Organizations



Based on most recent appraisal of 96 organizations



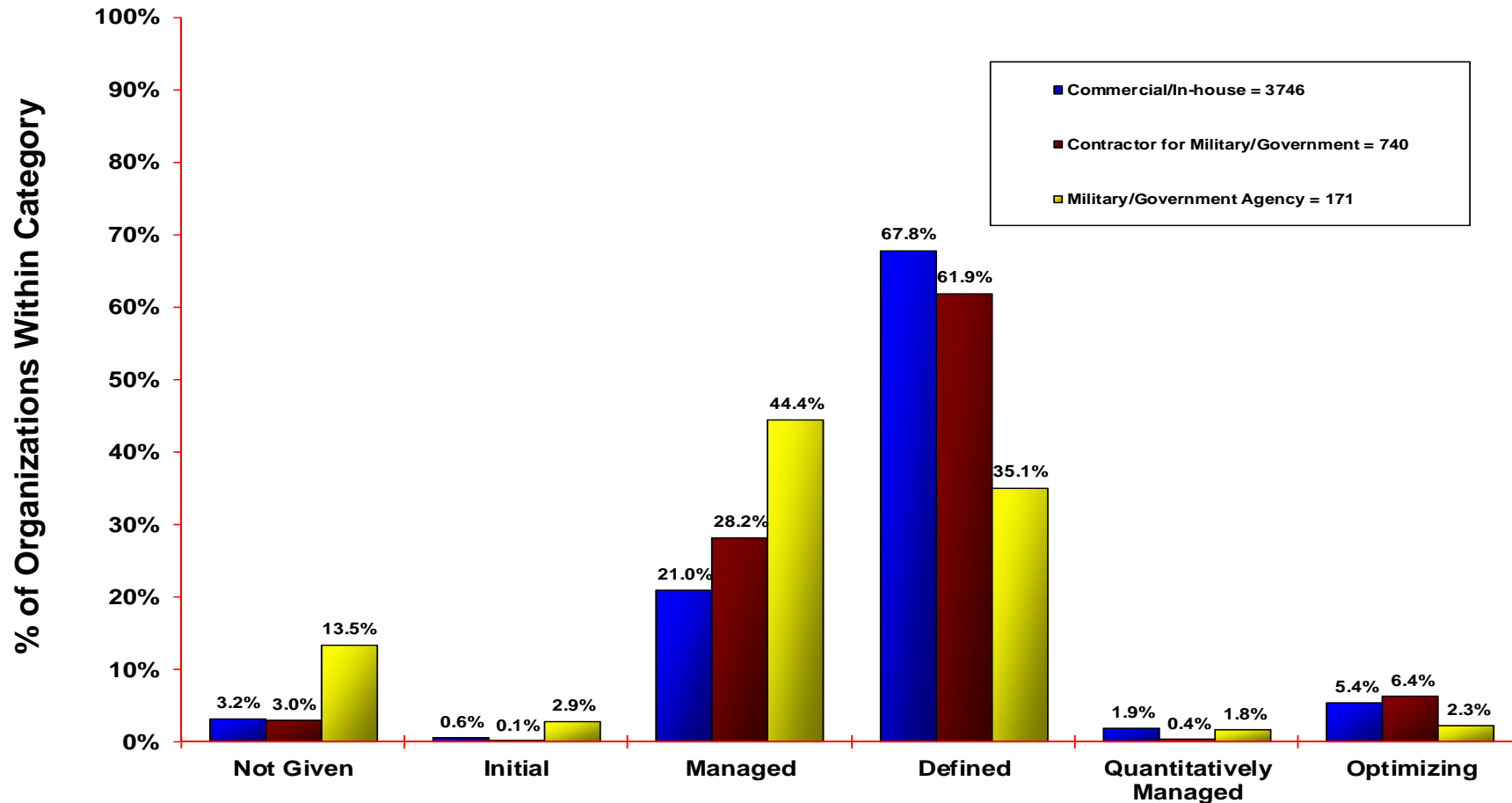
# Reporting Organization Categories



Based on most recent appraisal of 4657 organizations reporting an organization category



# Process Maturity Profile by Reporting Organization Categories



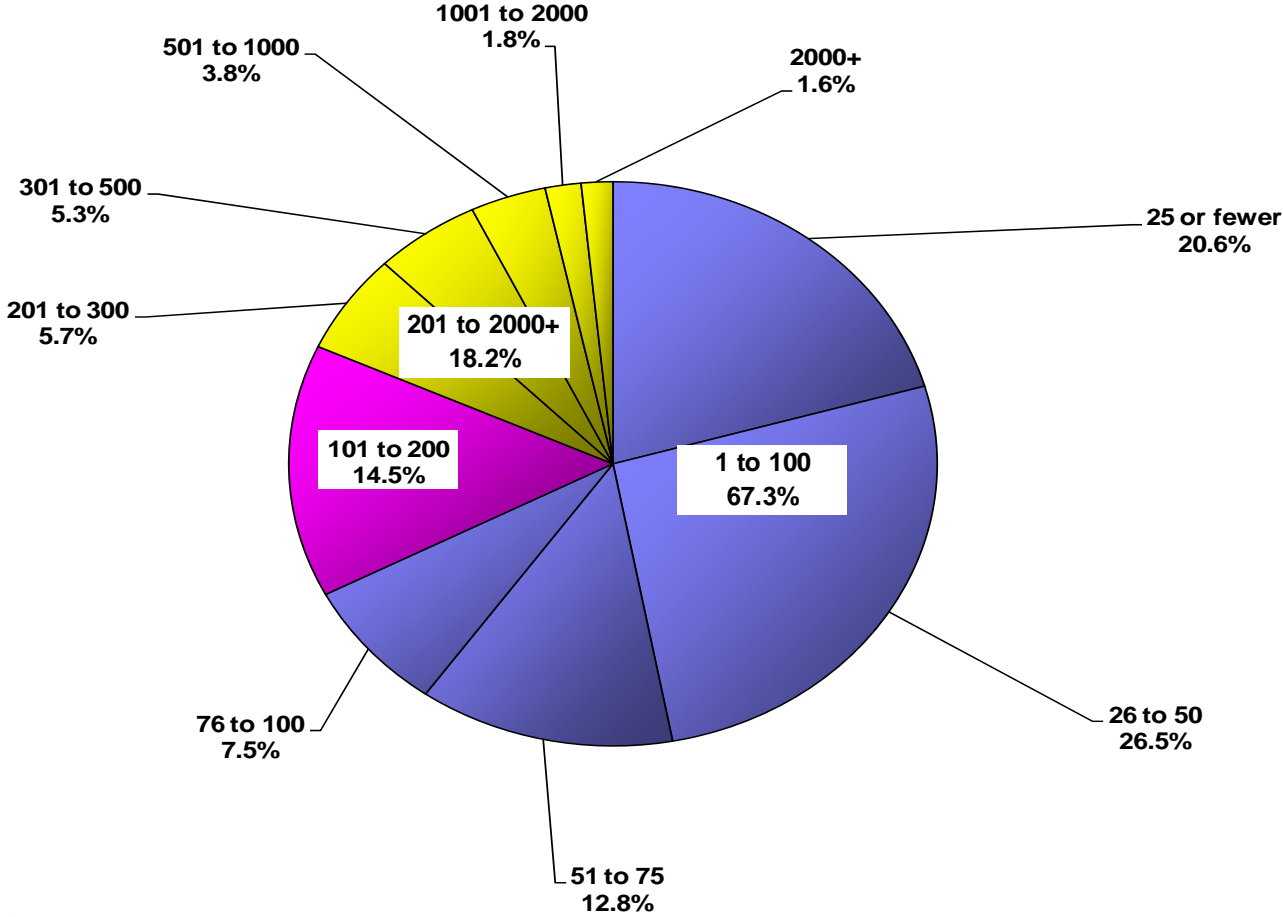
Based on most recent appraisal of 4657 organizations reporting an organization category





# Organization Size

Based on the total number of employees within the area of the organization that was appraised

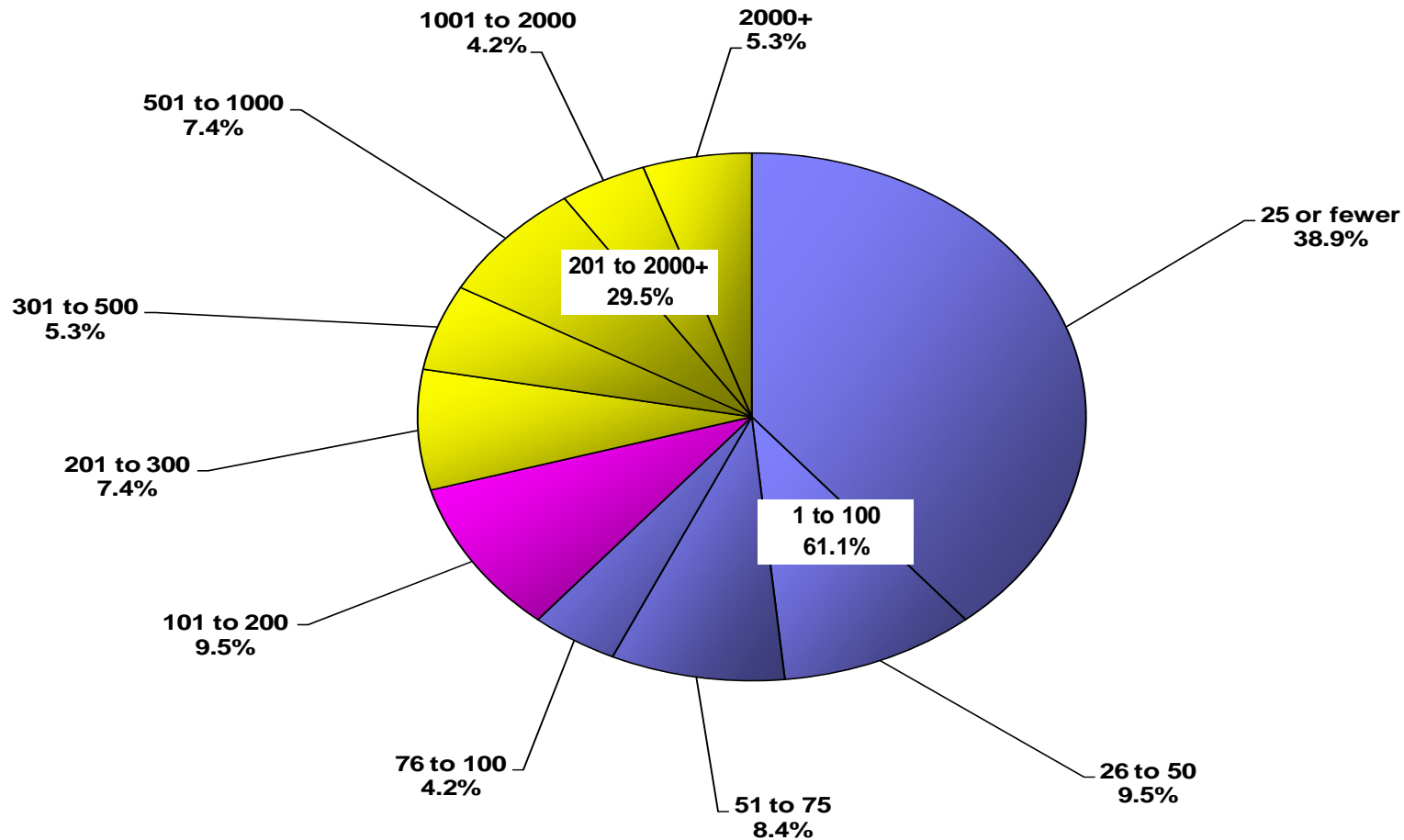


Based on 4703 organizations reporting size data



# Organization Size (SVC Only)

Based on the total number of employees within the area of the organization that was appraised

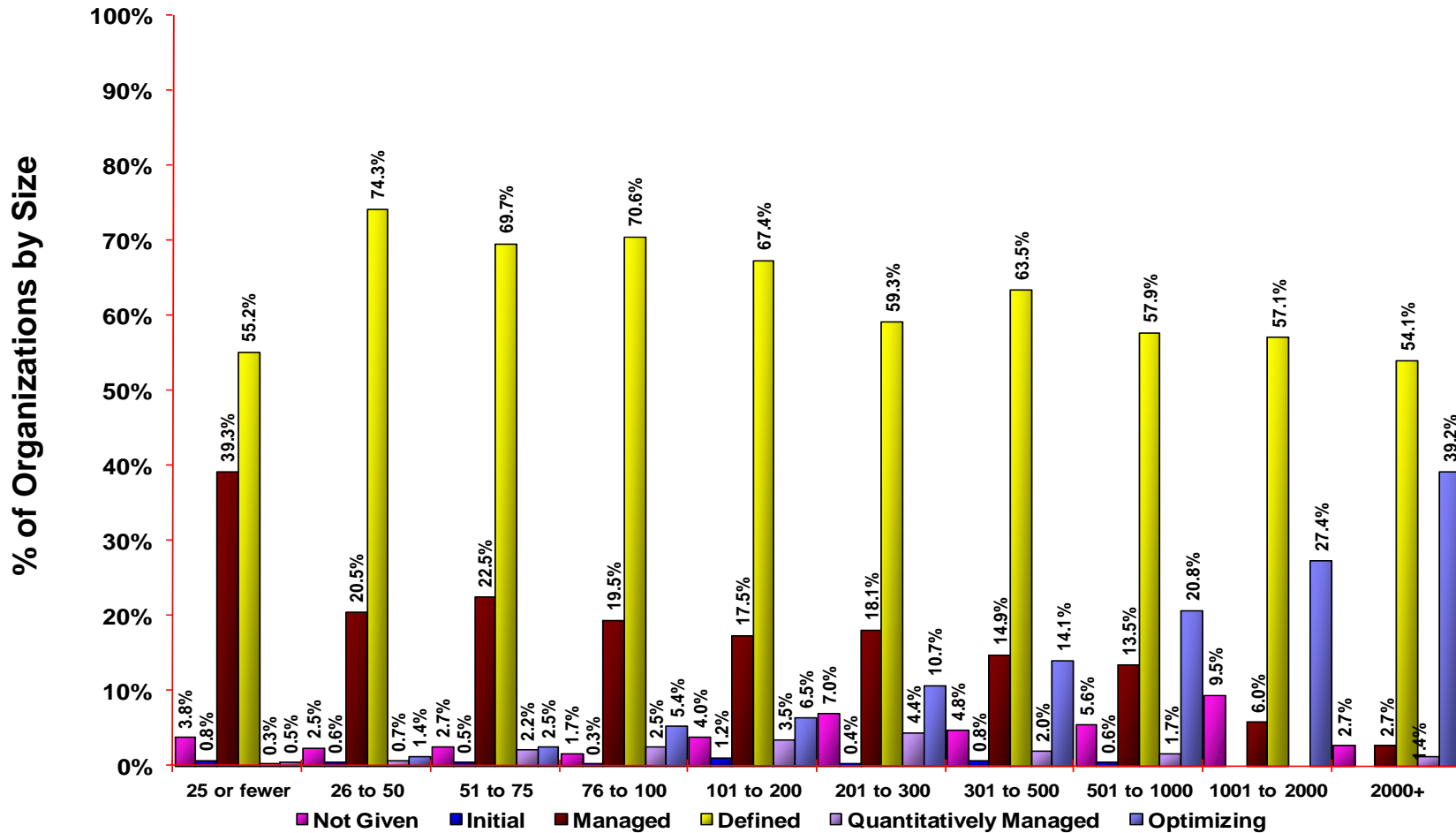


Based on 95 organizations reporting size data



# Maturity Profile by Organization Size

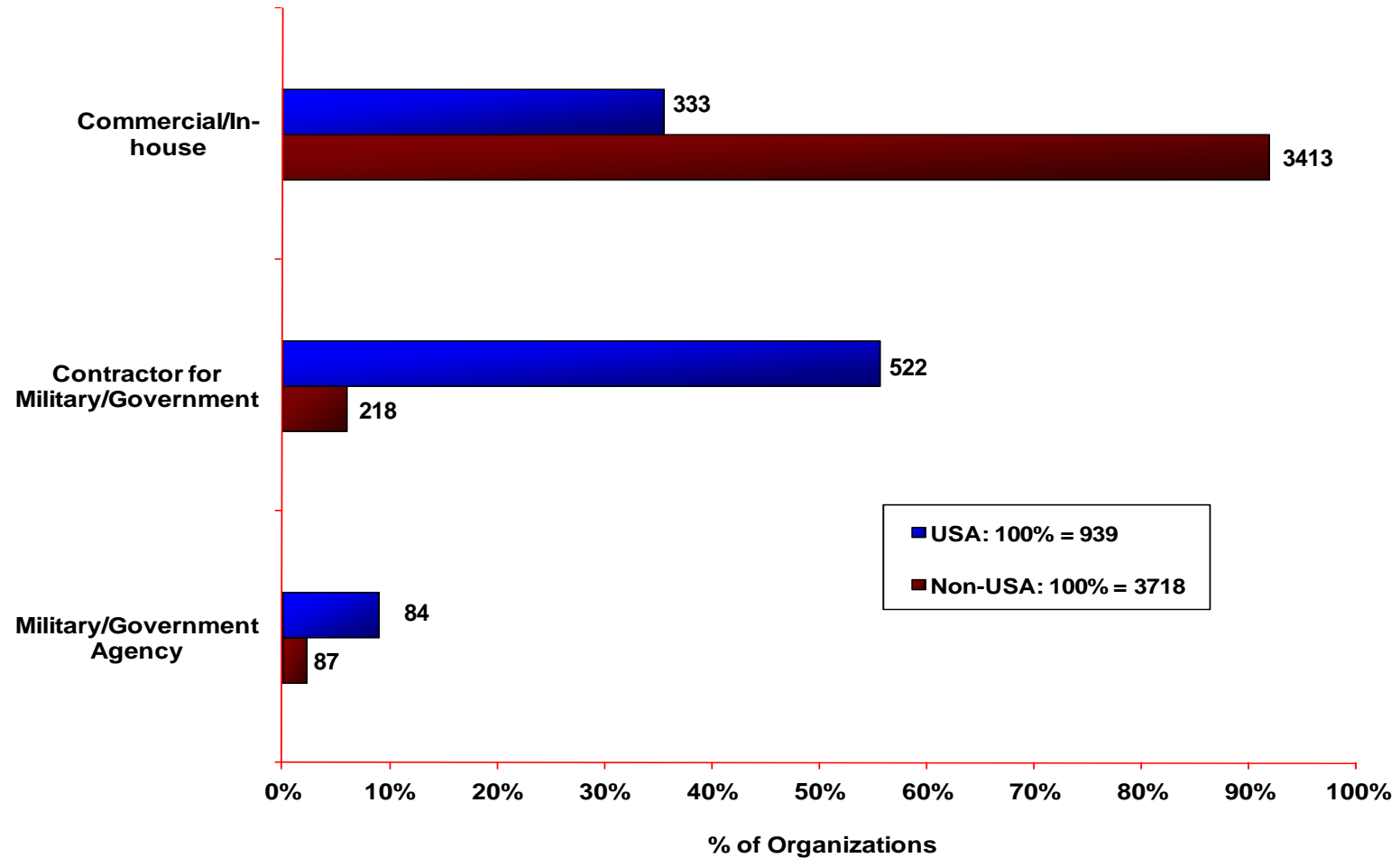
Based on the total number of employees within the area of the organization that was appraised



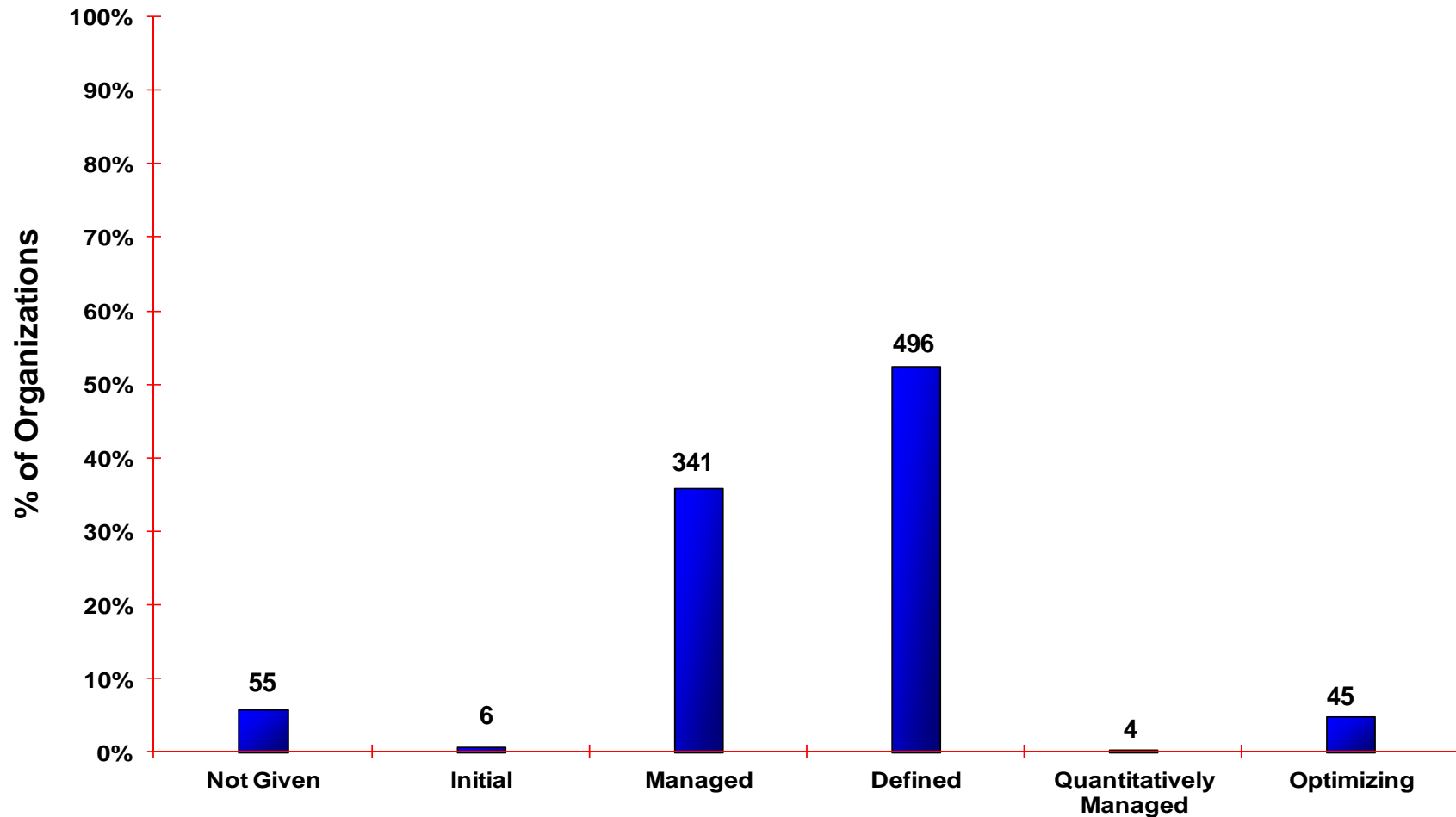
Based on 4703 organizations reporting size data



# USA and Non-USA Reporting Organization Categories



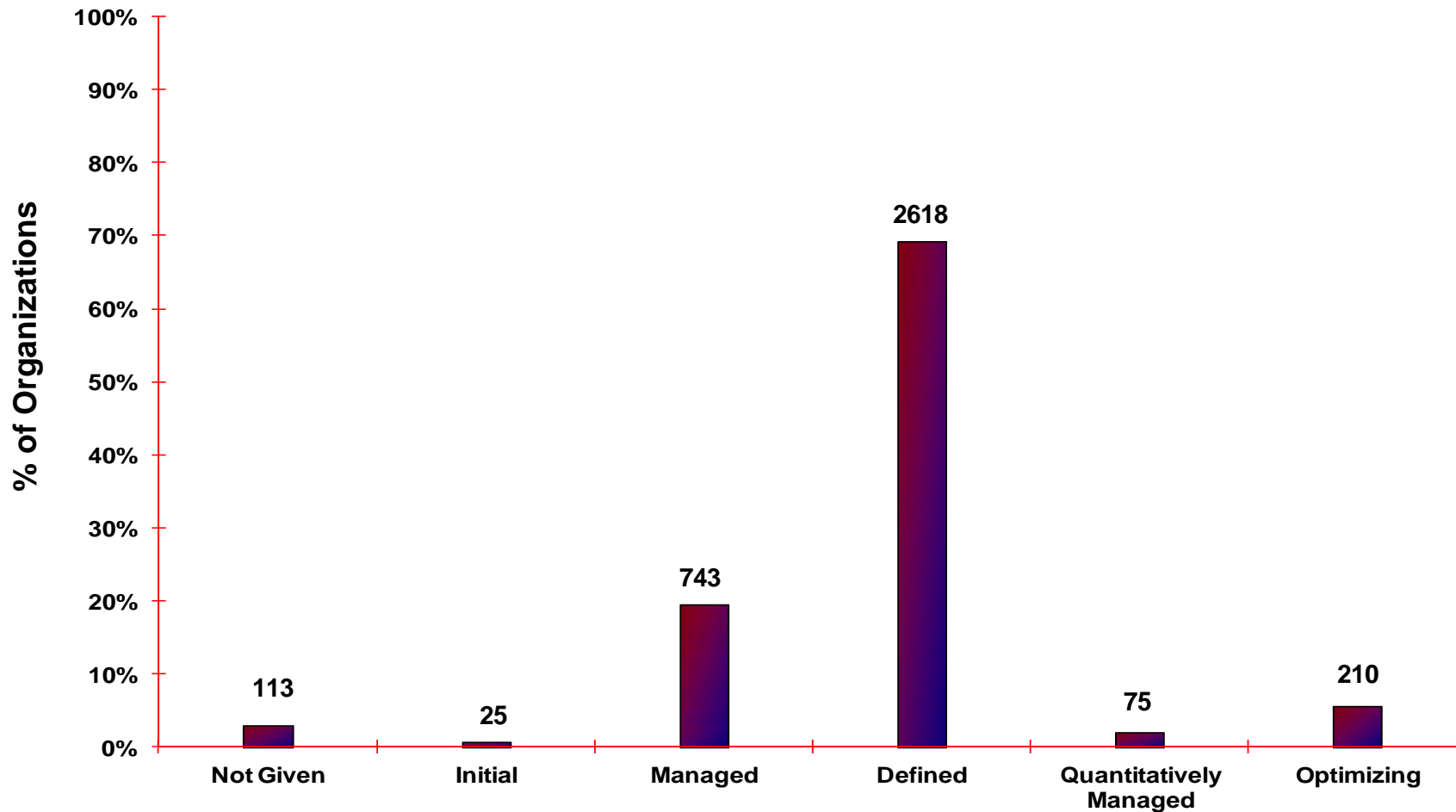
# Maturity Profile by All Reporting Organizations in the USA



Based on 947 organizations in the USA



# Maturity Profile by All Reporting Organizations based outside the USA



Based on 3784 organizations outside the USA



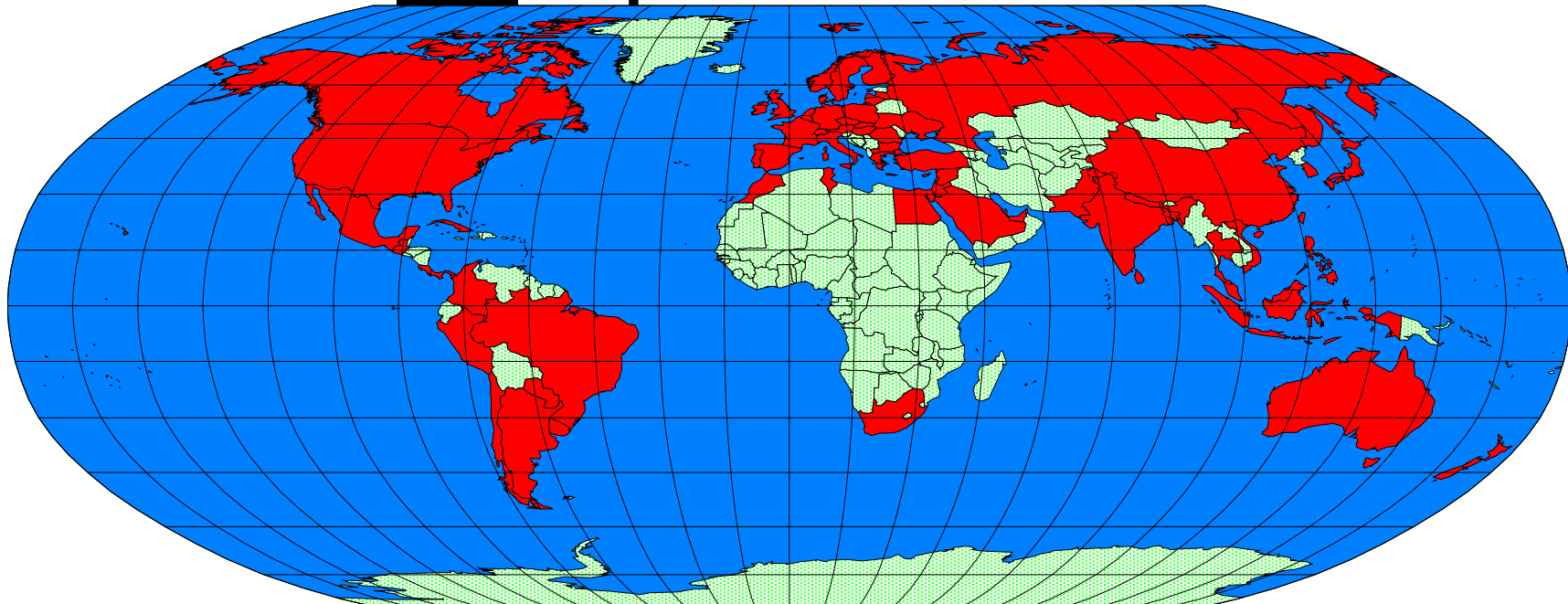
## Section 2—Community Trends

Appraisals are conducted through December 2011 and reported to the SEI by January 2012

- 76 countries reporting appraisals
  - Most of the appraisals are from Asia and North America.
- 5378 Appraisals posted on PARS
  - Expired appraisals are removed from PARS and replaced with the newest reappraisal result.



# Countries Where Appraisals Have Been Performed and Reported to the SEI



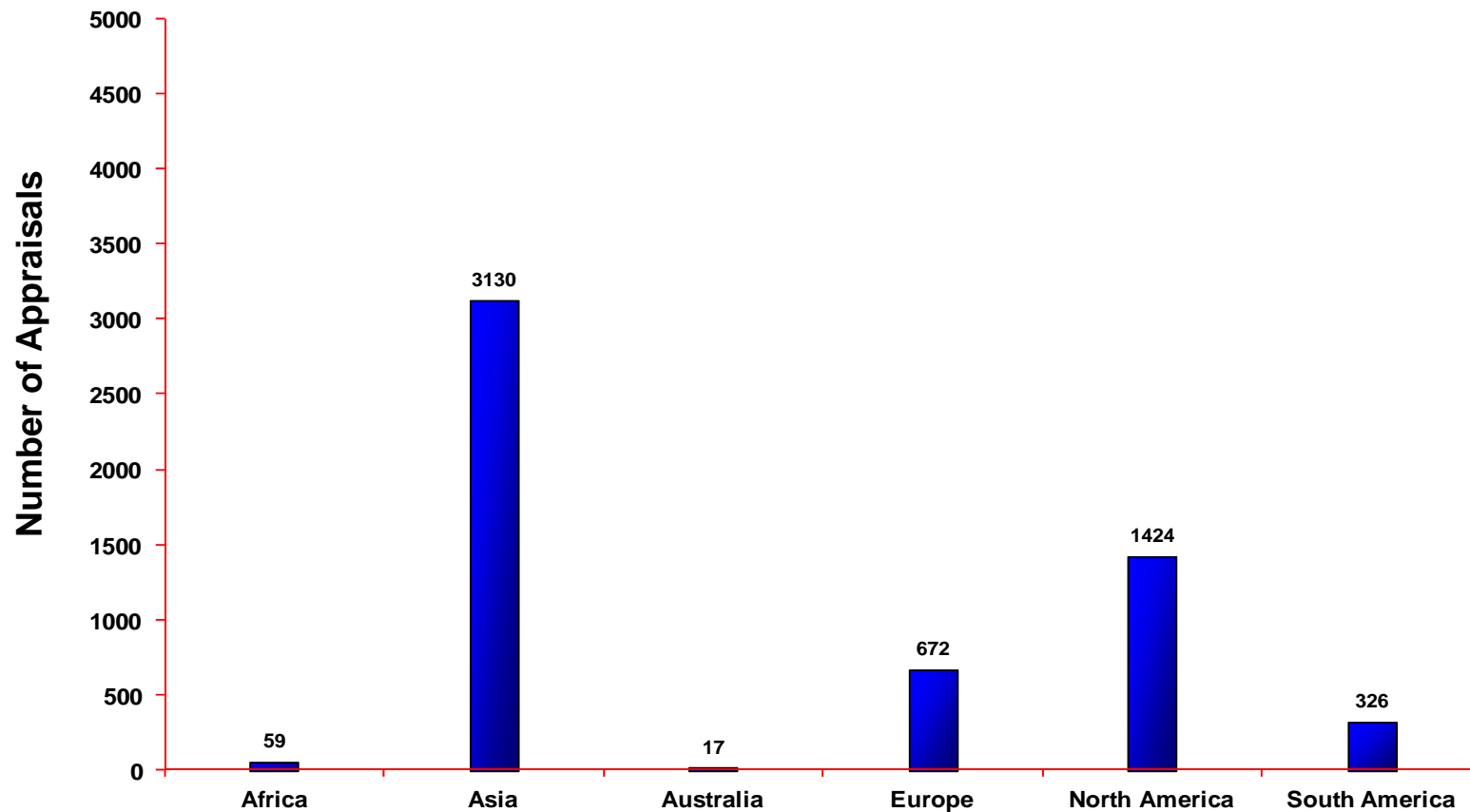
Argentina	Australia	Austria	Bahrain	Bangladesh	Belgium	Brazil	Brunei Darussalam
Bulgaria	Canada	Chile	China	Colombia	Costa Rica	<b>Cuba</b>	<b>Cyprus</b>
Czech Republic	Denmark	Egypt	Finland	France	Germany	Greece	Guatemala
Hong Kong	Hungary	India	Indonesia	Ireland	Israel	Italy	Japan
Jordan	Korea, Republic Of	Latvia	Lebanon	Lithuania	Luxembourg	Macedonia	Malaysia
Mauritius	Mexico	Morocco	Nepal	Netherlands	New Zealand	Norway	Pakistan
Panama	Paraguay	Peru	Philippines	Poland	Portugal	Qatar	Romania
Russia	Saudi Arabia	Singapore	Slovakia	South Africa	Spain	Sri Lanka	Sweden
Switzerland	<b>Syrian Arab Republic</b>	Taiwan	Thailand	Tunisia	Turkey	Ukraine	United Arab Emirates
United Kingdom	United States	Uruguay	Viet Nam				

Red country name: New additions with this reporting since September 2011





# Number of Appraisals Reported to the SEI by Continent

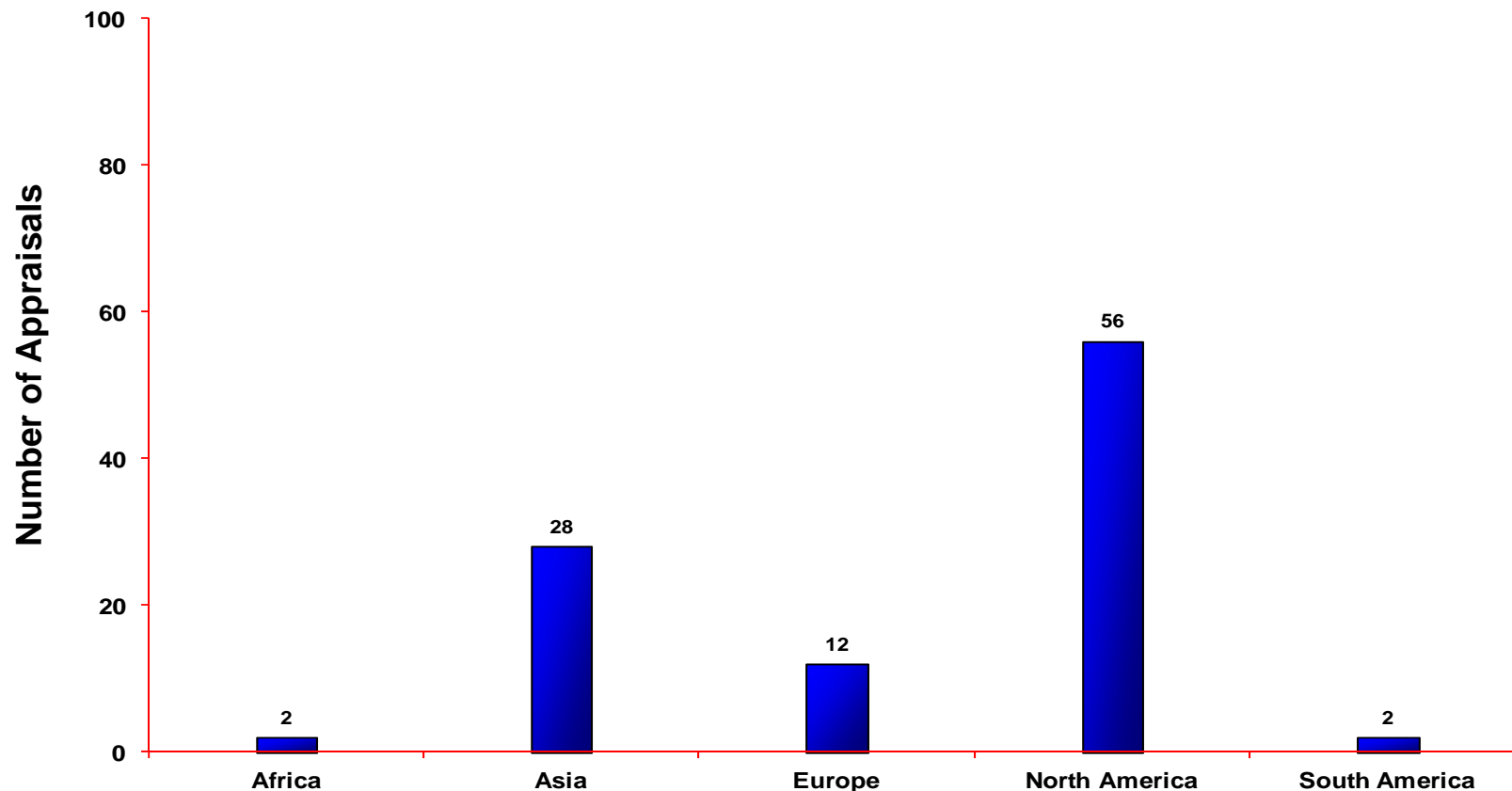


Based on 5628 appraisals

North America includes Canada, the USA, and Mexico; South America includes Central America and the Caribbean ; Australia includes New Zealand



# Number of Appraisals Reported to the SEI by Continent (SVC Only)



Based on **100** appraisals

North America includes Canada, the USA, and Mexico; South America includes Central America and the Caribbean ; Australia includes New Zealand



# Number of Appraisals and Maturity Levels Reported to the SEI by Country

Country	Number of Appraisals	Maturity Level 1 Reported	Maturity Level 2 Reported	Maturity Level 3 Reported	Maturity Level 4 Reported	Maturity Level 5 Reported	Country	Number of Appraisals	Maturity Level 1 Reported	Maturity Level 2 Reported	Maturity Level 3 Reported	Maturity Level 4 Reported	Maturity Level 5 Reported
Argentina	70		40	23		3	Macedonia	10 or fewer					
Australia	15		3	6		1	Malaysia	48		8	38		2
Austria	10 or fewer						Mauritius	10 or fewer					
Bahrain	10 or fewer						Mexico	116		56	52	1	5
Bangladesh	10 or fewer						Morocco	10 or fewer					
Belgium	10 or fewer						Nepal	10 or fewer					
Brazil	143	1	76	56		8	Netherlands	12	1	4	6		
Brunei Darussalam	10 or fewer						New Zealand	10 or fewer					
Bulgaria	10 or fewer						Norway	10 or fewer					
Canada	30	1	9	12		3	Pakistan	24	1	21	1		1
Chile	37	2	22	12		1	Panama	10 or fewer					
China	1866		71	1686	56	45	Paraguay	10 or fewer					
Colombia	43	1	16	10	3	5	Peru	18		10	7		
Costa Rica	10 or fewer						Philippines	12		2	4	1	4
Cuba	10 or fewer						Poland	10 or fewer					
Cyprus	10 or fewer						Portugal	20		8	10		2
Czech Republic	10 or fewer						Qatar	10 or fewer					
Denmark	10 or fewer						Romania	11	1	4	6		
Egypt	44	1	25	14		1	Russia	10 or fewer					
Finland	10 or fewer						Saudi Arabia	12		2	6	1	2
France	124	3	71	39		1	Singapore	17		5	10	1	
Germany	65	6	24	19			Slovakia	10 or fewer					
Greece	10 or fewer						South Africa	10 or fewer					
Guatemala	10 or fewer						Spain	222	1	125	74	2	8
Hong Kong	11		3	3		4	Sri Lanka	16		2	14		
Hungary	10 or fewer						Sweden	10 or fewer					
India	518	1	15	366	4	123	Switzerland	10 or fewer					
Indonesia	10 or fewer						Syrian Arab Republic	10 or fewer					
Ireland	10 or fewer						Taiwan	113	1	48	58	4	1
Israel	14			8		4	Thailand	51		16	33		2
Italy	55		27	24			Tunisia	10 or fewer					
Japan	187	7	43	97	8	9	Turkey	24			21		3
Jordan	10 or fewer						Ukraine	10 or fewer					
Korea, Republic Of	158		56	74	12	9	United Arab Emirates	10 or fewer					
Latvia	10 or fewer						United Kingdom	83	2	25	29		5
Lebanon	10 or fewer						United States	1278	10	470	636	5	68
Lithuania	10 or fewer						Uruguay	10 or fewer					
Luxembourg	10 or fewer						Viet Nam	22			18	1	3

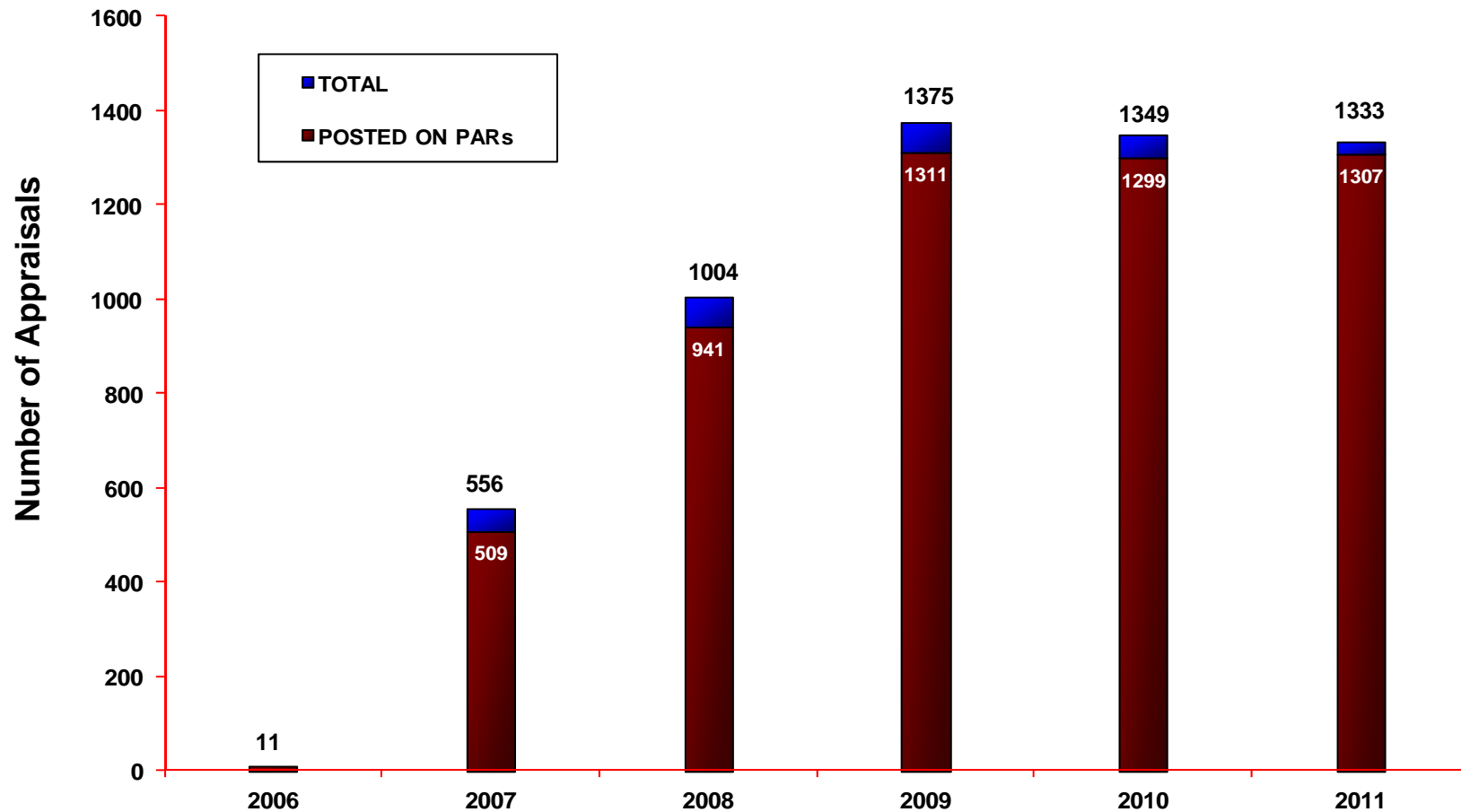


# Most Reported Appraisals per Year by Country

Country	2006	2007	2008	2009	2010	2011	Total
China	1	103	273	482	499	508	1866
United States	3	149	238	311	307	270	1278
India	5	81	80	117	110	125	518
Spain		15	30	75	43	59	222
Japan		16	47	40	40	44	187
Korea, Republic Of		21	30	28	35	44	158
Brazil		16	27	38	37	25	143
France		13	29	31	28	23	124
Mexico		4	18	30	35	29	116
Taiwan		18	29	19	24	23	113



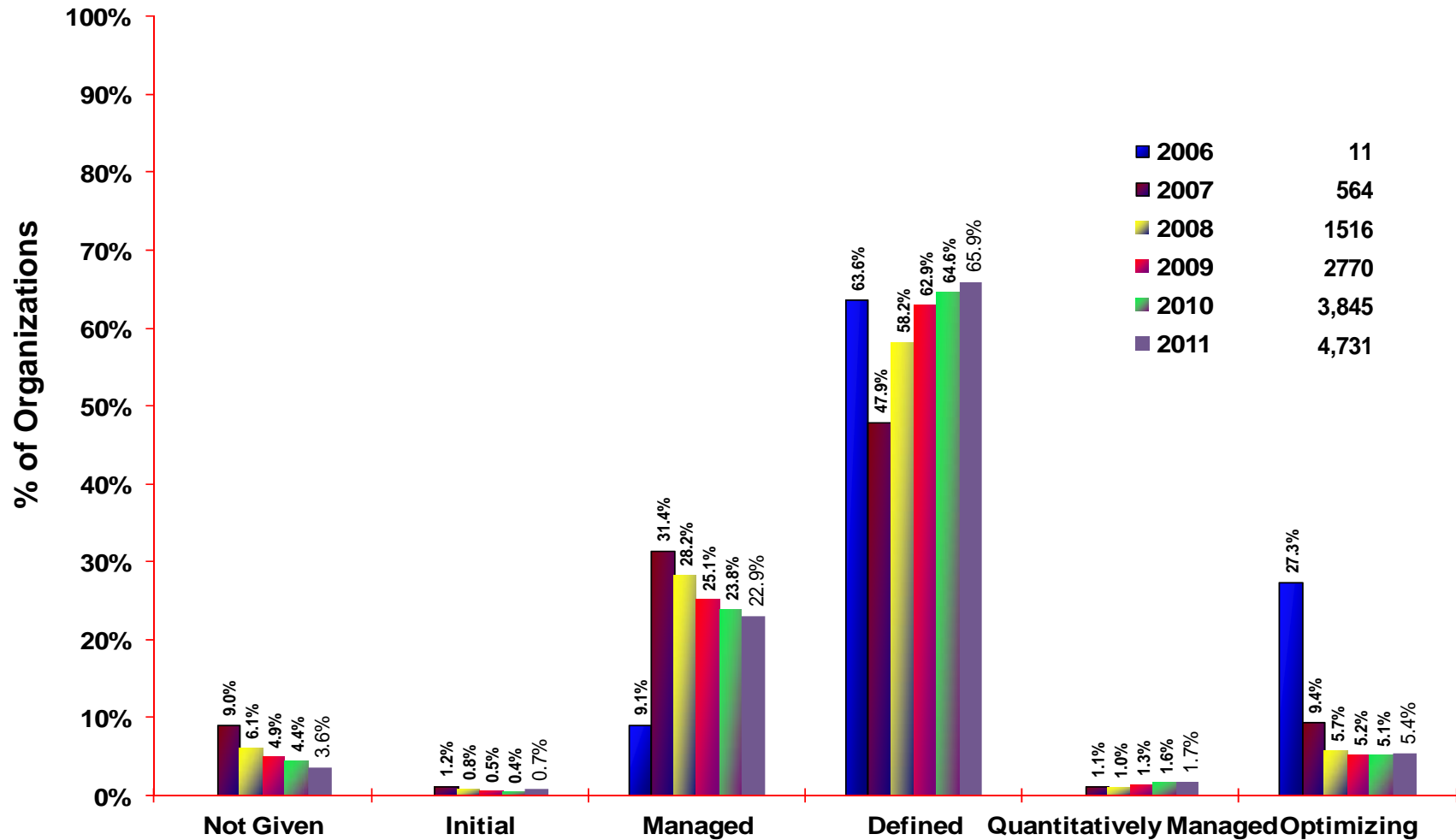
# Number of SCAMPI A Appraisals Reported to SEI by Year



Based on 5628 appraisals



# Trends in the Community Maturity Profile

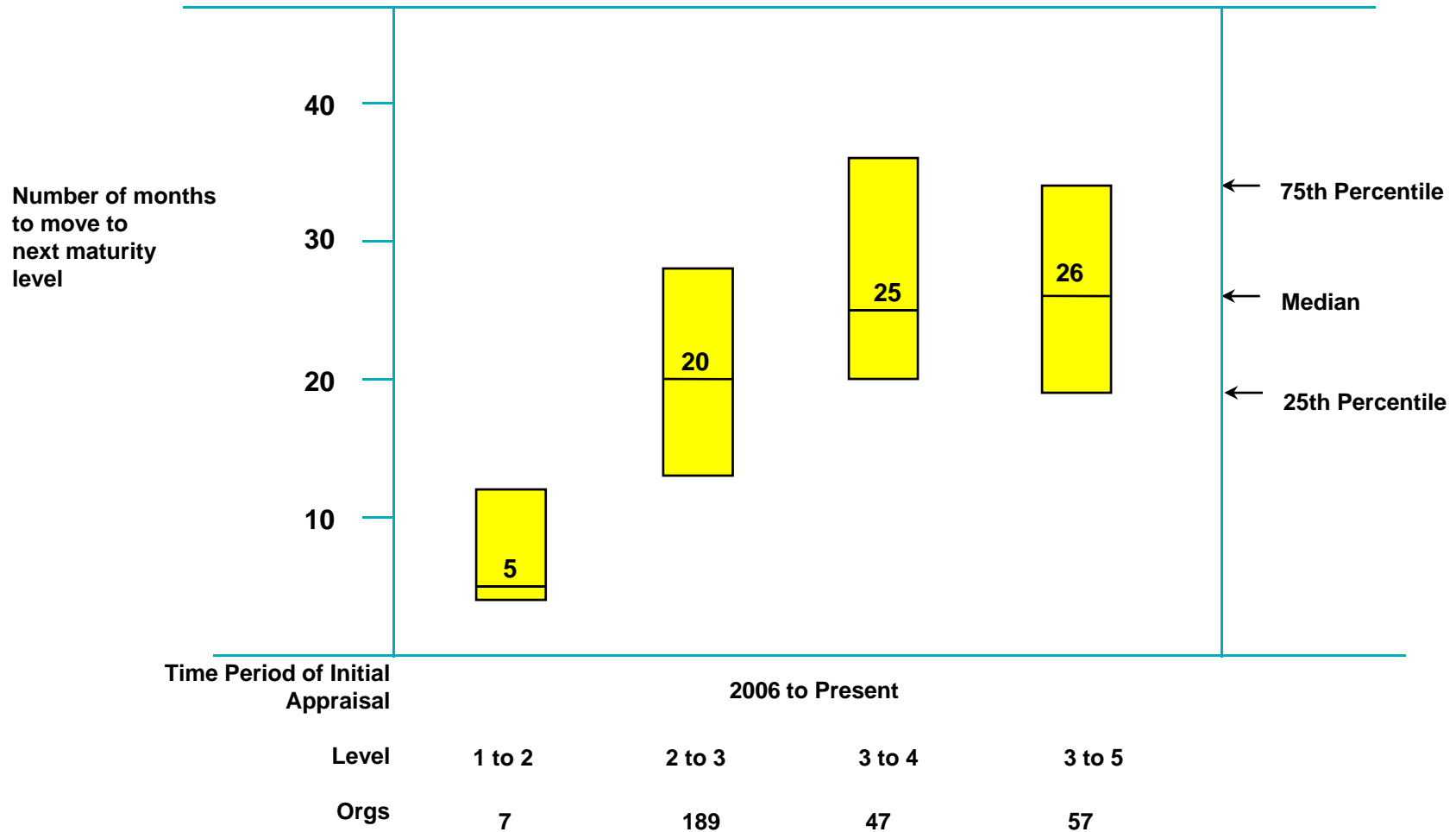


■ 2006	11
■ 2007	564
■ 2008	1516
■ 2009	2770
■ 2010	3,845
■ 2011	4,731

Based on a cumulative view of the most recent appraisals of organizations up through the year indicated



# Time to Move Up



# Summary -1

Since 2006, 5628 SCAMPI v1.2/1.3 appraisals have been reported to the SEI.

Despite global economic conditions, demand appears to be consistent. Only 42 fewer SCAMPI appraisals were performed in 2011 vs. 2009.

Appraisals reported from China, Spain, Korea, India and Japan are increasing at a rapid rate.

More than 67% of appraised organizational units have 100 or fewer employees. The percentage is increasing steadily.

The majority of reported appraisals are maturity level 2 and 3 organizations.

The number of appraisals in the USA and China represent more than 55% of the total number of appraisals.





# Summary -2

China is now reporting more appraisals than USA

For organizations that began their CMMI-based SCAMPI effort with V1.2 or later, the median time to move from

- maturity level 2 to 3 is 20 months
- maturity level 3 to 4 is 25 months
- maturity level 3 to 5 is 26 months

Note:

Since the September 2011 report, the median time to move from maturity level 2 to 3 increased from 19 months to 20 months. The median time to move from maturity level 3 to 4 increased from 21 months to 25 months. The median time to move from maturity level 3 to 5 increased from 25.5 months to 26 months.



# Terms Used in this Report

- Company** - Parent of the appraised entity. A company can be a commercial or non-commercial firm, for-profit or not for-profit business, a research and development unit, a higher education unit, a government agency, or branch of service, etc.
- Organization** - a.k.a. Appraised entity. The organization unit to which the appraisal results apply. An appraised entity can be the entire company, a selected business unit, units supporting a particular product line or service, etc.
- Non-USA** - Appraised entity whose geographic location is not within the United States. The parent of the appraised entity may or may not be based within the United States.
- PARS** - the Published Appraisal Results webpage contains CMMI® appraisals published at the request of the appraisal sponsor. The URL is:  
<http://sas.sei.cmu.edu/pars/>



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