



The Capable Cities Index:

The capacity of cities

DM Powell and M O'Donovan

**The Capable Cities Index:
The capacity of cities
DM Powell and M O'Donovan**

© Copyright DM Powell and M O'Donovan (2015) *The Capable Cities Index: The capacity of cities* (Cape Town: MLGI), available at www.mlgi.org.za. Powell is the principal investigator and project head and O'Donovan the principal data analyst for the project.

This Project was made possible with the assistance of the Ford Foundation and the Charles Stewart Mott Foundation.



FORDFOUNDATION

*Working with Visionaries on the
Frontlines of Social Change Worldwide*



CHARLES STEWART
MOTT FOUNDATION

About the Capable Cities Index: The capacity of cities

The Capable Cities Index (CCI) is a composite index that ranks the 27 largest cities in South Africa on the basis of their consistency in maintaining high levels of capacity, performance and compliance over the period 2010 to 2014. A capable city is one that maintains consistently high scores in all three components of capability.

The CCI is comprised of three separate indices: The Capacity Index (CI), the Performance Index (PI) and the Compliance Index (COI).

This Capacity Index (CI) is the first of the three to be published. It measures the capacity of cities to consistently fill staff and management positions and make permanent appointments in the posts of chief financial officer and municipal manager in the period 2010-2014. The other two indices will be published in the course of the year.

Measuring the capability of the 27 major cities

With the largest budgets in local government and staff complements that are sometimes larger than those of provincial governments, our 27 major cities play a crucial role in the country's political, economy and social life. "The proportion of South Africans living in rural areas has fallen by about 10 percentage points since 1994. Today, about 60 percent of the population lives in urban areas and slightly more than half of the poor live in cities. By 2030, about 70 percent of people are likely to be living in urban areas."¹ The legacies of apartheid social-engineering are still highly visible and deeply embedded in the spatial geography of cities and the unequal distribution of wealth and opportunity. Today, urban development and the role of cities in promoting economic growth and greater equity have risen to the top of the policy agenda, as evidenced by the publication recently of Government's *Integrated Urban Development Framework*.

Building a capable state is one of the key priorities in the country's National Development Plan. In the NDP the term "capability" has two different meanings, depending on the context in which it is being used. The first refers to **human capability**, and relates "to the conditions, opportunities and capabilities that enable people to lead the lives that they desire."² This idea of capability traces back to the pioneering work of the economist Amartya Sen on freedom as human capability.

The second meaning refers to the **capacity of the state** to play its role as enabler of human capability. The NDP uses a broad definition of capability in this second sense. "If we are to address the twin challenges of poverty and inequality, a state is needed that is capable of playing a transformative and developmental role. This requires well run and effectively coordinated state institutions staffed by skilled public servants who are committed to the public good and capable of delivering consistently high-quality services for all South Africans..."³

Capable city government is essential if the goal of building a capable developmental state is to be realized. Given the rapid and increasing rate of urbanization and the fact that

1 National Planning Commission (2011) *National development plan: Vision for 2030* (Pretoria: NPC), 7

2 Ibid, 5.

3 Ibid, 365.

many of the drivers of economic growth, poverty and inequality in the country are located in the major cities, state-wide capability cannot be achieved without capable city government. The centrality of local government generally and cities specifically in the development of the country is reflected in Government's "back to basics" policy, which was introduced in 2014 to address the wide-ranging problems that undermine the capability of local government to function effectively. Among other things, the back to basics policy stresses the need to appoint appropriately skilled managers in municipalities, improving financial management, taking strict action against financial misconduct, and boosting the quality and efficiency of service delivery.

The debate on capability is often also cast in the negative, as a debate about the extent of dysfunction or non-viability in local government. Claims that local government is dysfunctional are often made in public debates on the state of local government and even in government policy documents. But how can we tell that a city is showing signs of systemic capability or dysfunction? What are the causal variables we should examine? Over what time period do we measure these signs? The concepts that get used in debates about capability/ dysfunction are seldom defined precisely and often conflated. Terms such as non-viability, dysfunctional, collapses, failed are regularly applied to the local government system. As often such claims about the state of local government are made without any or sound metrical data being offered to substantiate them. Different departments and civil society organizations often use different yardsticks or variables that are not under the control of local government, for example, macro-economic variables. Claims about capability and dysfunction are too often made without credible supporting data and analysis on what factors may be causing either capability or dysfunction in municipalities.

The problem is that there is no general agreement on how we should measure the capability of local government. Therefore there is no way for us to tell with any accuracy whether the various interventions to improve capability in local government that are outlined in the NDP and policy are achieving that goal or even why the strategies adopted are the right ones. That makes it hard to have a responsible, informed public debate on the state of local government. Outlandish claims can stand their ground unchallenged even though no evidence is adduced to support the claim being made. For informed debate, however, it is necessary to look at the data and ask questions whenever a claim is made that local government is either dysfunction or capability: What do those concepts mean - How are they defined? How do you know - What is the evidence you are using? Where does the data come from and what methods were used to analyze data?

The CCI seeks to close that gap in the data and analysis to some degree. Focusing on the 27 major cities, though reflecting on data related to all 278 municipalities, the CCI aims to establish a clear framework for how we might measure the capability of the largest cities.

The CCI makes two analytical assumptions:

First, **the measurement of capability and dysfunction must focus on variables that are to a significant degree under the operational control of municipal governments themselves.** Disaggregating local government from the three-sphere system isn't always easy, but using variables that cannot be geo-referenced to municipalities is inappropriate and unfair. Some attempt must be made to define capability in more precise terms that are

linked to functions which are under the control of local government.

In our view, all municipalities have control over three sets of functions, and the basis for measuring the capability of cities should be derived from these. First, municipalities can take decisions to staff their establishments with skilled professionals (they control their own internal capacity requirements). Second, they can take decisions related to discharging their service delivery responsibilities (they control their own performance). And thirdly, they can take decisions that comply with statutory reporting obligations (they control their own compliance with the law). No municipality, large or small, can plead helplessness in these three areas, because properly exercising these functions is both a constitutional duty and the lifeblood of responsible local government. Capability is thus a cluster concept that connotes the core elements of responsible local government. Capability consists of three related functional elements that can be measured and weighted – **capacity** (municipal conduct focused internally), **performance** (municipal conduct focused externally), and **compliance** (municipal conduct in relation to reporting obligations in the law).

For each of the three elements of capability the CCI selects variables corresponding to the basic functions that a municipality must discharge for it to be considered effectively operational over a given period of time. Because these functions are common to all municipalities, it is now possible to measure and rank municipalities according to their level of consistency in discharging them over time. These variables selected do not include socio-economic variables that lie outside the control over municipalities as measures of municipal capability.

The second assumption is that capability must be measured as a trend in capacity, performance and compliance levels over time. What is important is not the absolute score of a municipality at any point in time but where it sits in relation to the deeper long term trend line in the data. International research shows that in contexts similar to South Africa's it can take decades before institutions develop anything like systemic resilience. Correspondingly, institutional fragility cannot be reliably measured over short time horizons. It is for that reason CCI uses data covering the period 2010-2014. As more data becomes available, the time period for measurement will be extended in later versions of CCI.

The trend line serves important analytical and policy functions. Knowing the trend is useful because we can look for correlations in other datasets to determine what factors matter, and hopefully to find the causes for the trend. The trend is also a useful marker for policy-makers. Until you see the trend you don't know what it is, and that creates the risk that policy-making will occur in the blind. Policy-makers can use the trend to calibrate their interventions more closely to the differences in actual circumstances, allowing them to mitigate the risk of policy being applied on a one size fits all basis regardless of real differences.

The CCI is a composite of three indices: The Capacity Index (CI) measures the capacity of the 27 cities over long time horizons (the internal dimension of local government). The Performance Index (PI) measures their performance over time (the external dimension of local government). And the Compliance Index (COI) measures compliance with the rule of law in municipal administration.

The Index mainly uses data that is publically available. We also obtained data from the

Auditor-General's Office that is not publically available, and we would like to acknowledge that support.

The Capacity Index (CI) is the first of the three indices to be published. The PI and COI will be published separately in the course of the year.

We are grateful to the Ford and MOTT Foundations for their ongoing financial support, which made this research possible.

Dr DM Powell
Mr M O'Donovan

MLGI (CLC)
University of the Western Cape

30 March 2015.

Measuring the capacity of cities

1. **How we measure the capacity of cities:** The Capacity Index (CI) is one of three indices that together comprise the Capable Cities Index (CCI), and the first of the three to be published. The Performance Index (PI) and the Compliance Index (Coi) will be published separately in due course.
2. The CI is a composite, weighted ranking of municipalities against 3 measures of their capacity, for the period 2010 to 2014. The three variables are:
 - The aggregate proportion of all municipal posts filled in the period 2010 to 2013 (inclusive)
 - The aggregate proportion of all senior municipal posts filled in the period 2010 to 2013 (inclusive)
 - Whether or not both CFO and municipal manager posts were filled by a permanent appointment in 2014.
3. The three variables were chosen as the most appropriate measures of capacity because filling funded management and staff posts and specifically the posts of chief financial officer (CFO) and municipal manager (MM) is both a basic requirement for a municipal administration to perform its operations and a decision that is entirely under the control of a municipality.⁴ By law, municipalities have an obligation to staff their establishments. These particular variables level the playing fields among all categories of municipality because they establish a common yardstick for measuring capacity that relates to functions all municipalities must discharge.
4. The rankings are presented in two formats:
 - A general index consolidates and weights the 3 variables for capacity and shows the ranking of the 27 major cities in relation to all 278 municipalities.
 - Specific indices rank only the 27 cities according to whether they have (a) filled senior management posts, (b) filled all staff posts, and (c) have permanent appointments in the CFO and MM posts.
5. The rankings are presented in these formats in order to show the relative rankings of category A (metro), B (local) and C (district) municipalities in relation to each other on the general index, and to show how the 8 metros (A) and 19 secondary cities (B1) rank against each other on the specific indices for filled management and staff posts and permanent appointments to the CFP and MM posts.⁵

⁴ We use a narrow definition of capacity in order to isolate variables that are exclusively under the control of municipalities. Wider definitions of capacity are often used, which incorporate objective considerations such as resources, economic viability, and factors relating to the supply and distribution of skills in the economy. We see municipal budgeting and expenditure as relating to the performance and compliance dimensions of capability and those two indices will measure variables relating to these elements. But economic variables are not appropriate measures of capacity in our narrow definition because they concern exclusive national functions and are not under the control of municipalities. The internal self-control dimension of capacity is where the debate about capacity should be located.

⁵ This categorization is widely used in government circles and is derived from the following system developed by Palmer Development Group, the National Treasury and the Department of Cooperative

6. The way the ranking system works is that municipalities are scored on each variable between 0 (lowest level observed) and 1 (highest level observed). For example, if either the CFO or municipal manager posts were not filled with a permanent appointment in 2014 the municipality received a score of 0. If both posts were filled, the municipality received a score of 1 for component three. The three components were then aggregated to give a composite capacity score for the municipality.

7. The data was sourced from StatsSA non-financial census of municipalities (p9115) and personal correspondence with StatsSA (data not published).

8. The first diagram below illustrates the relative rankings of all 278 municipalities on the spectrum of index scores. Municipalities showing consistently higher capacity are indicated by a higher score. Subsequent detailed graphics focus only on the 27 major cities and omit those municipalities which do not contain a city. As can be seen on the diagram, several municipalities achieved a score of 1. This corresponds to the municipality having all senior and other posts filled for the period 2010 to 2014 and permanent appointments in the CFO and Municipal manager posts in 2014. No municipality received a score of 0 (i.e. had one municipality received the worst score for each of the three components). The median score was 0.8 – half the municipalities received higher scores than this. A median score corresponds to a municipality having 15 percent or less of their posts vacant in the period 2010 to 2013, all senior management posts filled for the period 2010 to 2013, and both the CFO and MM posts filled with permanent appointments in 2014.

9. **Many smaller municipalities rank higher on capacity scores than metros:** The first diagram shows that metros are not, as might be expected, concentrated in the highest ranks. Ethekwini is the highest ranked metro but 14 smaller municipalities received higher ratings. Ethekwini's ranking was also significantly better than any other metropolitan municipality. Three quarters of the municipalities that received a better ranking than Ethekwini are largely rural and do not have a large town that functions as an administrative core.

10. A wide variation in capacity can be seen, with three clear trends. These trends correspond to

- Municipalities (Group 1) that have a score higher than Mangaung municipality (The latter sits on .75 on the Index, which is the point at which the trend line first changes direction).

Governance (see :

- A Metropolitan municipalities (metros)
- B1 Secondary cities, local municipalities with the largest budgets
- B2 Local municipalities with a large town as core
- B3 Local municipalities with small towns, with relatively small population and significant proportion of urban population but with no large town as core
- B4 Local municipalities which are mainly rural with communal tenure and with, at most, one or two small towns in their area
- C1 District municipalities which are not water services authorities
- C2 District municipalities which are water services authorities

- Municipalities (Group 2) that received a lower score than 0.75 but higher than 0.35 (the point at which the trend line changes direction for a second time) and
- The six municipalities (Group 3) that received a score lower than 0.35.

11. **Trend for group 1:** Two thirds of municipalities (164) fall into group 1 (they have a capacity index of greater than Mangaung at 0.75). This group is marked by a relatively low variation in their index ratings as there is only a gradual decline in their rating from the best to the worst (shown as a sloping black line in the diagram). That trend indicates that this group of municipalities maintained a reasonably consistent level of capacity for the period 2010-2014.

12. **Trend for group 2:** 108 municipalities (38 percent) fall into group 2. Municipalities in group 2 display wide variation in capacity. Their trend line declines more steeply, indicating lower levels of capacity and a more rapid fall-off in capacity.

13. **Trend for group 3.** 6 municipalities (2 percent) fall into group 3. The municipalities in the third group display anomalously poor capacity, indicated by their low position in the overall rankings and an even more pronounced decline in the trend line.

14. The three distribution profiles suggests that there are optimal and sub-optimal policy strategies for building municipal capacity in the long term, depending on which group a municipality falls into. A strategy pushing for 100% filled posts across the board is sub-optimal and unrealistic for many municipalities, because only 4 municipalities achieved a score consistent with all posts being filled during this period. If vacancy rate stay constant at current levels, with few municipalities obtaining perfect scores, the probability is high that in the foreseeable future most municipalities will not fill all posts across the three indicators, regardless of policy promoting that end.

15. **The different trends for different groups of municipalities indicate that there are optimal and sub-optimal strategies to improve capacity of local government :** A strategy aimed at raising municipalities up to the level of the best performers in group 1 may be a viable strategy for other municipalities in group 1, but not for those in groups 2 and 3. In group 1 the trend line is shallow, indicating that the distance between the best and worst ranked municipalities in the group is small and the benchmark set by the best performers is attainable by all municipalities in the group. The better performers (like Ethekewini) might be expected to lift their rating to 1 – usually by ensuring that no junior posts are vacant.

16. The equilibrium in capacity among the group 1 municipalities (those that receive a score higher than 0.75) suggests that attaining the minimum rating of group 1 (0.75) is an attainable objective for municipalities in group 2. Some municipalities of every type consistently exceed a score of 0.75, indicating that the objective is attainable irrespective of whether a municipality is a metro, local or district and, for example, whether the municipality has a major town that functions as an administrative core. A strategy that aims to raise group 2 municipalities to the minimum rating attained by Mangaung is thus optimal, for all three categories of local government.

17. A recurring question is how to deal with the group 3 municipalities, which are generally dysfunctional municipalities. Given their low rankings and steep trajectory any

strategy aimed at raising municipalities in group 3 to the minimum target of 0.75 is not viable.

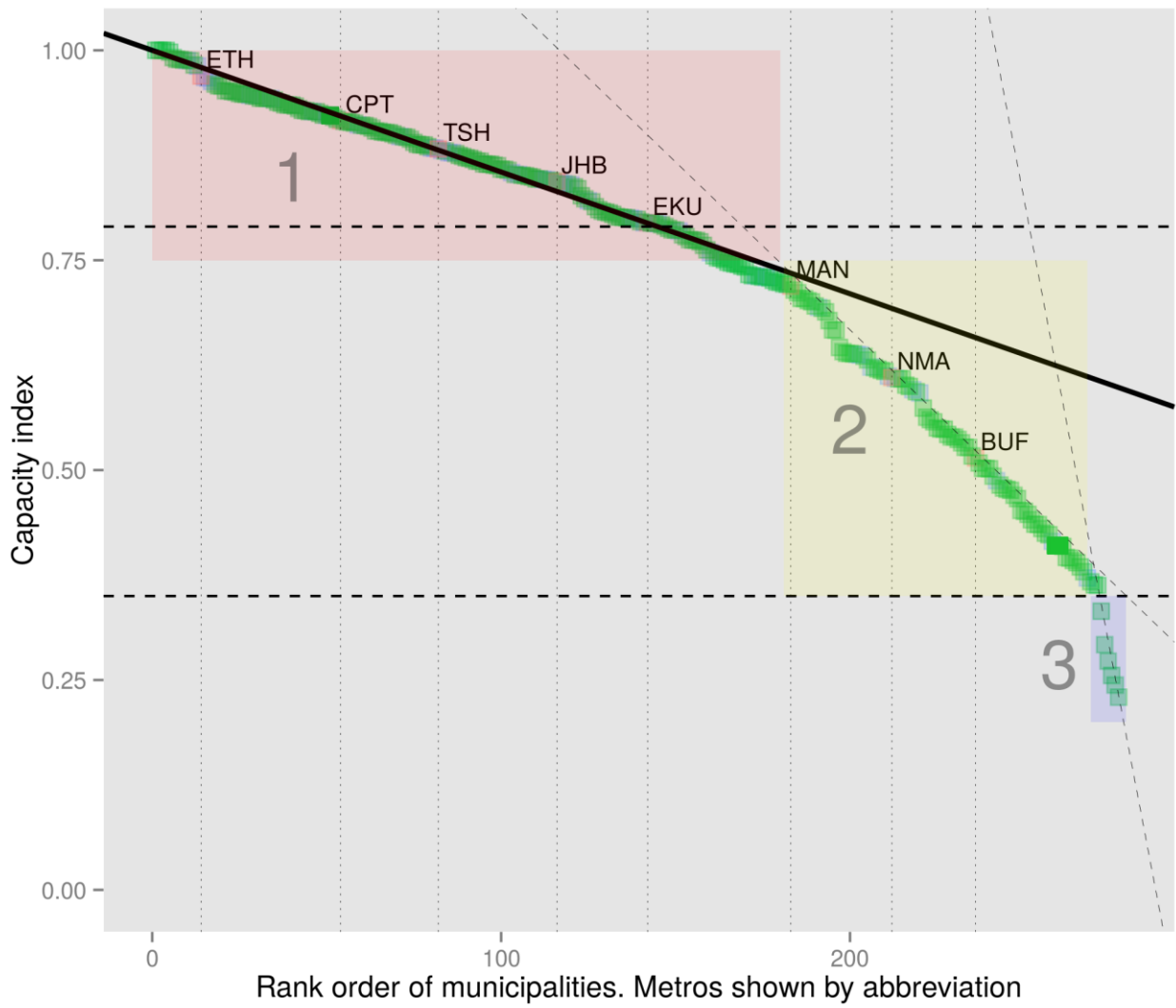
18. One strategy to improve the functionality of group 3 municipalities may be to use the provincial corrective intervention powers under section 139 of the constitution. However, other data shows that there is a relatively poor correspondence between these municipalities and section 139 interventions, as only three of the six municipalities in this group have been subject to intervention.

19. An alternative to direct intervention is to amalgamate these municipalities with larger adjacent municipalities. The data suggests that this strategy is not necessarily optimal as, indicated by the low rating of some metros like Buffalo City and Nelson Mandela Bay, larger municipality are not necessarily endowed with higher capacity indices.

Key to the first graphic

The location of metropolitan municipalities on the capacity spectrum is highlighted in the graphic. The graphic shows that there is no clear trend with any one of the three categories dominating a section of the spectrum. Metros are as likely to be at the bottom of the spectrum as they are to be at the top.

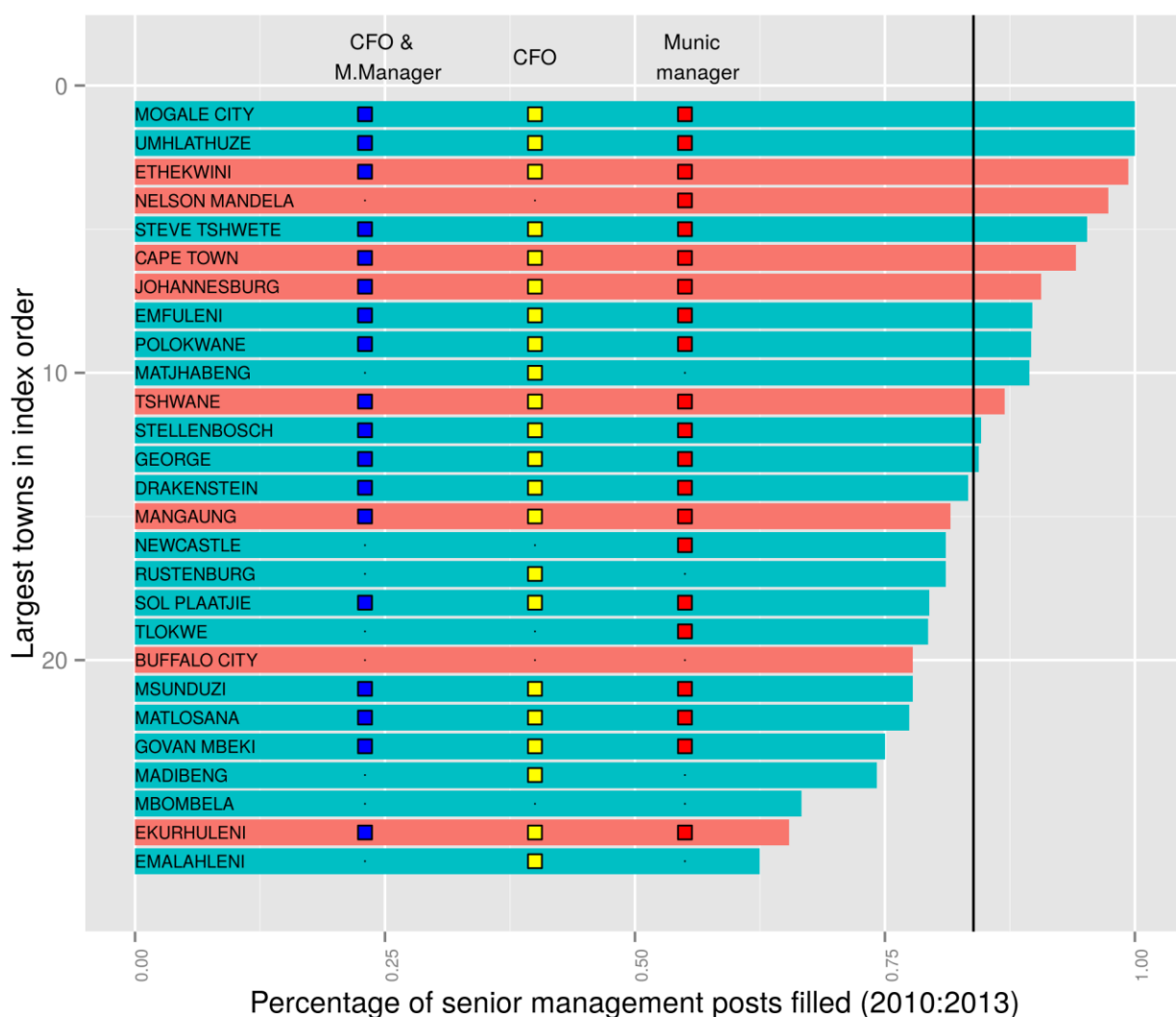
The downward sloping black line shows the trend line among group 1 municipalities. Lightly dotted lines show the steeper trends for groups 2 and 3. In the short term narrowing the gap between the group 1 trend line and group 2 municipalities is a more viable strategy than attempting to lift all group 2 municipalities to a score of 1 on the index.



20. **One third of all cities have not appointed permanent CFO and MMs.** The second graphic shows that during the period 2010 to 2013 an average of 16 percent of senior manager posts were not filled in the 27 largest cities (i.e. category A and B1 municipalities). In the most severe cases up to one-third of senior management positions were vacant. With a 13 percent vacancy rate among senior managers metros are slightly better than B1 municipalities (with 17 percent vacancies) at filling senior posts. However three of the eight Metropolitan municipalities have higher than average vacancy rates.

21. The graphic also indicates whether the municipality had a permanently appointed Chief Financial Officer (CFO, yellow square), a permanent municipal manager (red square) and if both posts were filled by permanent appointments (blue square). If, like Mogale City, the posts of CFO and Municipal Manager were filled by permanent appointments the corresponding bar for Mogale City contains blue, yellow and red markers. If the city only has the CFO position filled then it will be shown by a yellow marker alone. One third of the cities do not have both the CFO and Municipal Manager posts filled by permanent appointments. Two of the 27 cities had neither of these posts filled. One quarter of Metropolitan municipalities do not have permanent CFOs. A smaller proportion (16 percent) of the smaller cities does not have permanent CFOs. By contrast only one of the eight metros does not have a permanent municipal Manager (12 percent). Twice that proportion of B1 municipalities (26 percent) does not have their Municipal Manager post occupied by a permanent appointment.

22. **There is a correlation between not having permanent CFOs and MMs and higher vacancy rates among senior management.** Municipalities in which one of these posts was not filled by a permanent appointment tended also to have higher vacancy rates among senior management in general. Metropolitan municipalities tend to have slightly lower vacancy rates among senior appointments than other cities do.



23. The third graphic shows how the 27 cities rank in regard to filling all posts. An average of 82 percent of municipal posts was filled during the period, with 18 percent of municipal posts vacant. The vacancy rate in metropolitan municipalities is 12 percent. By contrast the vacancy rate in B1 municipalities is almost twice as great (21 percent). As indicated by the graphic the rate at which posts were filled varied greatly, ranging from as little as two percent of posts to as much as 47 percent of posts. The average rate at which posts were filled is indicated by the vertical line on the graphic.

24. **There is a correlation between not having permanent CFOs and MMs and higher vacancy rates in staff posts.** Once again, municipalities without permanently appointed CFOs and Municipal Managers have higher vacancy rates among municipal posts in general. Only one municipality has a vacancy rate that is higher than the average for cities in general. Not having the CFO and Municipal Manager posts filled by a permanent appointment thus seems to have negative impact on the extent to which other management posts are filled as well as on the vacancy rate among lower posts.

