New York City Independent Budget Office Fiscal Brief

February 2011

Stabilizing Revenue Collection During the Downturn:

How Assessment Phase Ins and Caps Affect the City's Property Tax

Summary

THE PROPERTY TAX IS THE CITY'S LARGEST TAX REVENUE SOURCE, totaling $16.4 billion in collections in fiscal year 2010. It is also a very stable revenue source. Even as the city weathered the recent slump in the real estate market, property tax collections continued to grow. This stability stems in large part from how changes in market value and assessed value are translated into tax liabilities under state law.

For most properties in the city—commercial and large residential buildings—changes in market value, and ultimately assessments and the resulting tax bills, are phased in over a period of five years and the portion of the assessments waiting to be phased in is often called the pipeline. For one- to three-family homes and residential buildings with 10 or fewer apartments, there are caps on how much assessments can grow each year, and over five years.

The phase-in of assessment increases or decreases, caps on assessment growth, and other features built into the property tax system moderate annual assessment changes and minimize year-to-year spikes upwards or downwards. The stabilizing features limit growth in assessments when market values are rising rapidly, and they work in reverse when market values fall.

This report explains the features that contribute to the stability of the property tax system. It shows how caps on growth in assessed value can lead to higher assessed values—and tax bills—even when market values decline, and why, in some cases, increases in market values are never fully captured in assessments or property tax bills. It also shows how assessments move through the pipeline and how the pipeline grew through 2008, due to both market forces and policy changes at the Department of Finance, and how those increases helped cushion the city's tax collections during the recent downturn:

- In 2008, the pipeline peaked with an estimated $19.4 billion in assessments to be phased in
- The pipeline holds an estimated $6.7 billion in 2011, the current fiscal year, down from $11.8 billion last year.

The pipeline of assessments to be phased in is expected to resume growing next fiscal year. The tentative assessment roll for 2012 released last month by the city's Department of Finance includes rising assessments for apartment buildings and commercial properties. While owners still have an opportunity to challenge the assessments, it is likely that there will be some growth in the pipeline when the assessments are finalized.

Also available: Twenty-Five Years After S700A: How Property Tax Burdens Have Shifted in New York City @ www.ibo.nyc.ny.us

IBO

New York City
Independent Budget Office
Ronnie Lowenstein, Director

110 William St., 14th floor
New York, NY 10038
Tel. (212) 442-0632

Fax (212) 442-0350
iboenews@ibo.nyc.ny.us
www.ibo.nyc.ny.us

INTRODUCTION

The city's property tax is a very stable revenue source. During the recent recession, while the city's business, income, real estate transfer, sales, utility, and hotel taxes—collectively the "economically sensitive taxes"—all declined dramatically, revenue from the property tax continued to grow. The economically sensitive taxes peaked in 2008 at $22.9 billion. In 2009, at the start of the downturn in the local economy, they declined to $19.0 billion. After reaching a low of $18.7 billion in 2010, IBO expects the economically sensitive taxes to resume growth in 2011, but not return to the level seen in 2008 until 2012. In contrast, from 2008 through 2012, revenue from the property tax is forecast to grow steadily, averaging 7.7 percent a year, though part of that growth stems from a 7.0 percent tax increase in December 2008 (reversing a previous cut.) But property tax revenue would have grown even without the increase in the tax rate, albeit at a somewhat slower average annual rate of 5.8 percent.

The stability of the property tax is due more to structural features of the tax than to underlying stability of the real estate market—which experienced a steep run-up in prices followed by declines in recent years. This stability stems from how changes in market value and assessed value are translated into tax liabilities under the real property tax law.[1]

Each year, the Department of Finance (DOF) determines a market value from which the taxable assessed value is calculated. Market value as defined by the department is not necessarily a reflection of the potential sale price of a building—for coops and condo apartments the law actually requires DOF to use procedures that result in market values far from the likely sales price.[2] While there are many important issues regarding how DOF determines the market value (see IBO Dec 2006 report), for this analysis, IBO took the DOF market values as a starting point from which to consider how changes in market value translate into changes in taxable assessed value.

For properties in Class 2 (large residential buildings) and Class 4 (commercial property), increases or decreases in assessed value resulting from changes in DOF market value are phased in at 20.0 percent a year for five years. As a result, these two classes have a pipeline of assessment changes from the preceding four years plus the current year that phase in each year, smoothing out annual changes. Together Class 2 and Class 4, referred to as the "pipeline properties," account for 77.3 percent of the city's billable assessed value.

In times of rapid appreciation, such as in recent years, the pipeline grows quickly. When the market slows, this buildup in the pipeline provides a cushion that keeps billable assessed values and property tax levies growing, even in the face of declining market value. However, if the real estate slowdown outlasts the pipeline, billable assessed values and tax revenues may begin to decline.

The assessed value of properties in Class 1 (made up of one-, two- and three-family homes) also exhibits a stable pattern of growth, though the structural features that moderate Class 1 growth are different. First, the city sets a *target* assessment ratio for Class 1, currently 6.0 percent. (The assessment ratio is defined as assessed value divided by market value, expressed in terms of percents; for example, where assessed value is one-tenth of market value, the assessment ratio is 10.0 percent.) The assessment ratio for an individual Class 1 property is 6.0 percent or less because there is a cap on increases in assessed value, discussed below. (This is in contrast to the other classes where the assessed value is equal to the market value times the assessment ratio.)[3]

Second, for houses in Class 1 and buildings with 10 or fewer units in Class 2 (collectively referred to as the "capped properties"), the annual increase in assessed value is capped at 6.0 percent or 8.0 percent, respectively, and the cumulative growth in assessed value is limited to 20.0 percent in five years for Class 1 and 30.0 percent for Class 2. When market values grow faster than the cap, assessed values do not keep up. But when market values decline, assessments can continue to increase as they recoup some of the previous growth in market value that was not reflected in property tax assessments. Because of the cap on annual increases, the median assessment ratio for Class 1 properties in 2011 was actually 4.8 percent, well below the 6.0 percent target ratio, but an increase from 3.6 percent in 2008.

The remaining group, Class 3, contains utility property. There are no limits to increases or decreases in market value in Class 3. However, given that just 7.2 percent of the citywide assessed value is in Class 3, they are not considered further.

This report looks more closely at the structural features that provide stability in the property tax and examines the current status of the pipeline, along with a brief review of the historical data. How much growth from the preceding four years exists to buttress tax revenues in the near term?

PROPERTY TAX ASSESSMENTS MORE STABLE THAN MARKET VALUE

Because of the way the property tax system is structured, property tax assessments are less volatile than Department of Finance market values (available since 1993), during both real estate market expansions and contractions, although the effect was more pronounced in the recent expansion. In the chart on page 4, we compare inflation-adjusted taxable market value (market value less

Property Tax Primer

The process for determining a property's assessment for tax purposes in New York City requires a few calculations, with some differences in methodology by tax class.

Market Value: The first step is estimating the market value of the property. Market value for Class 1 properties and for Class 2 buildings with fewer than 11 units is almost always based on recent sales of comparable buildings. For residential buildings with 11 or more units and commercial property, market value is usually based on the current value of the projected future income stream from the building. To calculate the value of the future income stream, the city has generally used capitalization of net operating income, although from 2009 through 2011 it used a gross income multiplier approach for apartment buildings with 11 or more units.

Equalization Change: The portion of the change in value that is not due to physical changes to the property such as new construction, alteration, additions, or demolition, is attributed to overall market conditions and is labeled equalization change.

Actual Assessed Value: The second step in determining a property's assessment for tax purposes is calculating the actual assessed value. Generally, the actual assessed value is the market value times the assessment ratio for that class. For Class 1, the assessment ratio is 6.0 percent, while it is 45.0 percent for all other property.

However, the cap on assessment increases for small residential properties limits the increase in the actual assessed value. For those in Class 1, the limit on annual increases is 6.0 percent a year or 20.0 percent over five years and for those in Class 2 with 4 to 10 units the limit is 8.0 percent per year or 30.0 percent over five years. Therefore, these caps on increases can lead to actual assessed values below the value that results from applying assessment ratio to the market value for these properties.

Transitional Assessed Value: For commercial property and residential buildings with 11 or more units, the Department of Finance also calculates a transitional assessed value. The transitional assessed value is equal to last year's transitional assessed value plus the pipeline phase-in, which is equal to one-fifth of the change in actual assessment due to equalization for the current year and each of the preceding four years. For residential buildings with less than 11 units, the transitional and actual assessed values are the same.

Actual Taxable Assessed Value and Transitional Taxable Assessed Value: The assessed value (either actual or transitional) less the exempt value is the actual taxable assessed value and transitional taxable assessed value.

Billable Taxable Assessed Value: The next step is to determine the billable taxable assessed value that will be used to calculate the tax liability. For residential properties under 11 units, it is the actual taxable assessed value. For residential properties with more than 10 units and commercial property, it is the lower of the actual taxable assessed value or the transitional taxable assessed value.

Property Tax Levy: The billable taxable assessed value times the tax rate for the class is the property tax due for that parcel.

Property Tax Revenue: The total property tax levy for the city is the sum of all the individual tax parcels' tax levies for the current year. Actual property tax revenue that the city collects in a year will be lower than the levy. To determine revenue it is necessary to subtract abatements as well as account for delinquencies, reductions in tax bills, refunds, and other adjustments, all of which are partially offset by collections from prior-year liabilities.

Exemptions and Abatements: Exemptions are reductions to the taxable assessed value—like deductions on income taxes—and are, therefore already accounted for in the property tax levy. Abatements, on the other hand, are reductions to a property's levy—like credits on income taxes.

exemptions) with taxable assessed value and see much more stable change in assessed value.[4]

Between 1993 and 1997, taxable assessed value declined at an average rate of 2.8 percent a year, while taxable market value declined more quickly at an average rate of 3.3 percent a year (measured in real terms). The effect was even more noticeable during the recent real estate market boom. Between 1998 and 2009, market value grew about four times as fast as taxable assessed value. Taxable market value growth averaged 5.0 percent a year in real dollars from 1998 to 2009, compared to 1.2 percent a year for taxable assessed value.

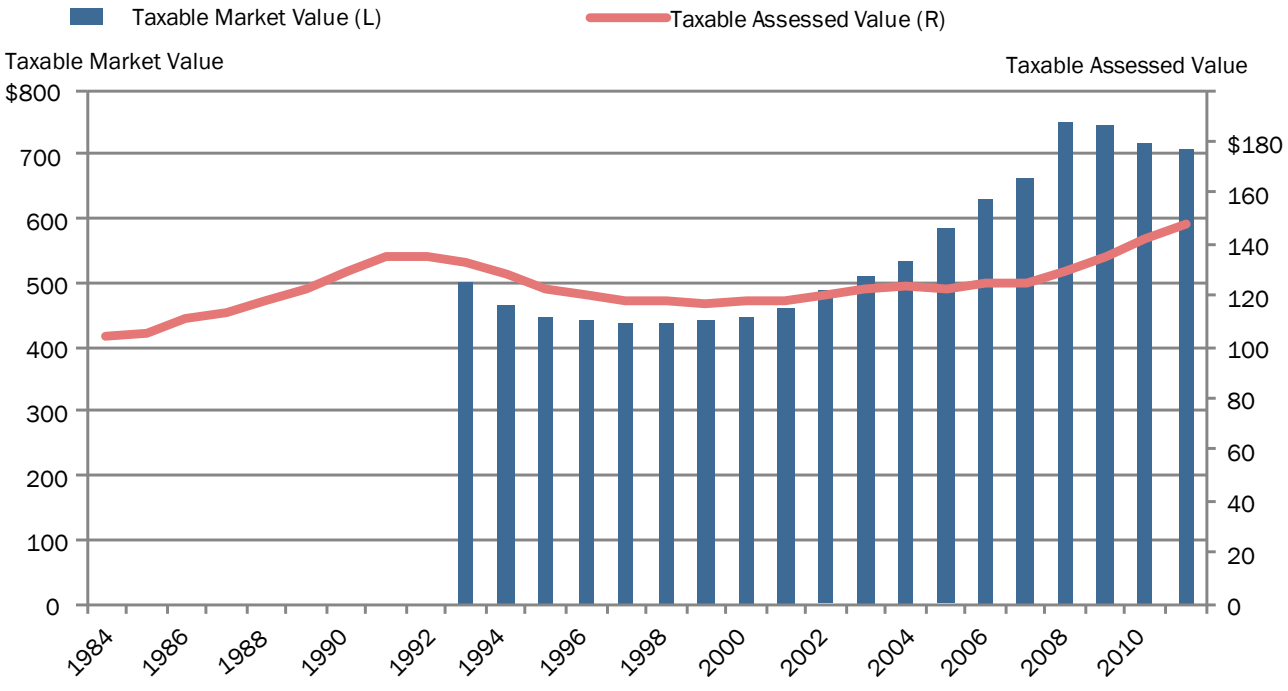
Even though taxable assessed value has continued to rise as aggregate market value has declined over the past four years, assessments have varied less than market values. With the real estate market contracting, aggregate market value began to fall in 2009 with a decline of 0.7 percent, compared with a 3.9 percent increase in taxable assessed value. The divergence was greater in 2010, with a taxable market value decline of 3.5 percent, compared with a 5.5 percent increase in taxable assessed value. The divergence of assessment growth from market value growth moderated but continued in 2011, with aggregate taxable market value declining by 1.2 percent while taxable assessed value increased by 3.8 percent.

PROPERTY TAX ASSESSMENTS AND STRUCTURAL STABILITY

Structural stability in the property tax is a result of mechanisms that moderate changes in assessed value from year to year. There are two main mechanisms—the cap on assessments for small residential properties and the phasing in of changes in assessed value in Classes 2 and 4. About 93 percent of the city's taxable assessed value derives from properties that benefit from one of these two mechanisms; only utility property recognizes the full change in market value in the year it occurs.

The phasing in of changes in market value (and the pipeline of changes waiting to be phased in over time) is the more fiscally significant mechanism because more than three-quarters of taxable assessed value is subject to that provision, compared with 16 percent for the assessment cap. As a result, there is a larger dollar impact on the levy from the phase-in than the assessment cap.

During Real Estate Boom Taxable Assessments Nearly Flat After Adjusting for Inflation, While Taxable Market Value Grows
Dollars in billions (2011)



SOURCE: IBO; Department of Finance Recordbook.
NOTES: Taxable Market value is adjusted to reflect changes in exemptions and data are not available before 1993.Taxable market value equals market value times ratio of exempt assessed value to total assessed value.

For pipeline properties, the phasing in of market-driven changes in assessed value kept billable taxable assessed value rising steadily, while market value grew rapidly from 2004 to 2008 before flattening out. For residential properties with fewer than 11 units, the combination of caps on increases in assessed value and target assessment ratios kept assessed value from increasing as fast as market value during the boom and kept assessments increasing even after the bubble had burst.

How Do Assessments Work for Pipeline Properties? For pipeline properties increases and decreases in value due to market conditions—referred to as "equalization changes"—are gradually phased in over five years, at 20.0 percent a year.[5] In contrast, increases or decreases stemming from physical changes, such as demolition, new construction, or alteration, are recognized fully in the year they occur. However, most market value changes are equalization changes, rather than resulting from physical changes.

For a pipeline property, DOF calculates two assessed values—the actual and the transitional—and the property is taxed on whichever is lower. The actual assessed value is equal to the current market value, as determined by DOF, times the assessment ratio, or in this case, 45.0 percent. As such, the actual assessed value fully reflects all changes in the year they occur.

Calculating the transitional assessed value is more complicated and requires calculating the amount in the pipeline and the amount that will phase in that year. Change in the market value resulting from equalization changes are first multiplied by the assessment ratio (45.0 percent) and then added to the pipeline in five equal pieces. The first of these five pieces is added to the current year's phase-in amount and each of the other four is added to the phase-in pipeline for each of the four subsequent years.

Thus, the phase-in from the pipeline for a given year represents 20.0 percent of the change in that year, plus 20.0 percent of the change from the prior year, 20.0 percent of the change from the year before that, and so on for five years. To calculate the transitional assessed value for a given year, the phase-in amount for that year is added to the prior year's transitional assessment. (When a parcel is first established—most commonly when condo lots are apportioned from a previously existing parcel—the transitional and actual assessed values are the same. In later years, the transitional assessment is always based on the prior year's transitional assessment plus a portion of the pipeline, while the actual assessment is based on the current year's market value).

It may be easier to demonstrate how the pipeline calculation works with an example. Let us take a commercial property valued at $1,000,000 in 2006, with no physical changes and a 6.0 percent a year market value increase. If this were a new tax lot, the assessed and transitional value in the first year would be $450,000, or 45.0 percent of the market value. In 2007, the market value would become $1,060,000 and the actual assessed value would increase to $477,000. The transitional value would only increase by 20.0 percent of the $27,000 increase, or $5,400. In 2011, when we have a full five years of history, the actual assessed value increases by $34,100. The transitional value increases $30,400, which is the sum of the five annual additions to the pipeline.

By 2011, five years after the hypothetical building was completed, the actual assessed value would be $602,200, compared with a transitional assessed value of $537,800. Throughout the five years of the example, the transitional value is lower than the actual assessed value. Because the tax is based on whichever is lower, this property's transitional value would serve as its billable assessed value—put simply, the basis for its tax bill. Given the current tax rate in Class 2, the use of the pipeline and transitional assessed value reduces this hypothetical building's property tax liability in 2011 by about $8,600.

Illustration of Calculation of Assessed Value of a Pipeline Property

Dollars in thousands

	Calculation of Assessed Value				Additions to Transitional Assessed Value				
	Market Value	Actual Assessed Value	Full Addition	Transitional Assessed Value	2007	2008	2009	2010	2011
2006	$1,000.0	$450.0		$450.0					
2007	$1,060.0	$477.0	$27.0	$455.4	$5.4	$5.4	$5.4	$5.4	$5.4
2008	$1,123.6	$505.6	$28.6	$466.5		$5.7	$5.7	$5.7	$5.7
2009	$1,191.0	$536.0	$30.3	$483.7			$6.1	$6.1	$6.1
2010	$1,262.5	$568.1	$32.2	$507.3				$6.4	$6.4
2011	$1,338.2	$602.2	$34.1	$537.8					$6.8
Phase-In Subtotal					*$5.4*	*$11.1*	*$17.2*	*$23.6*	*$30.4*

SOURCE: IBO

NOTES: Assumes 6 percent a year market value growth from 2006 on, and, for simplification, that the transitional and actual values in 2005 were equal (i.e. new building). Assumes no exemption on property.

Historical Trends in Pipeline Property Assessment. The pipeline has slowed the growth of billable taxable assessed value compared with taxable market value. The difference between actual taxable assessed value and billable taxable assessed value (essentially the difference between actual and transitional values for properties benefiting from the pipeline) widens and narrows depending on how much was added to the pipeline in prior years.

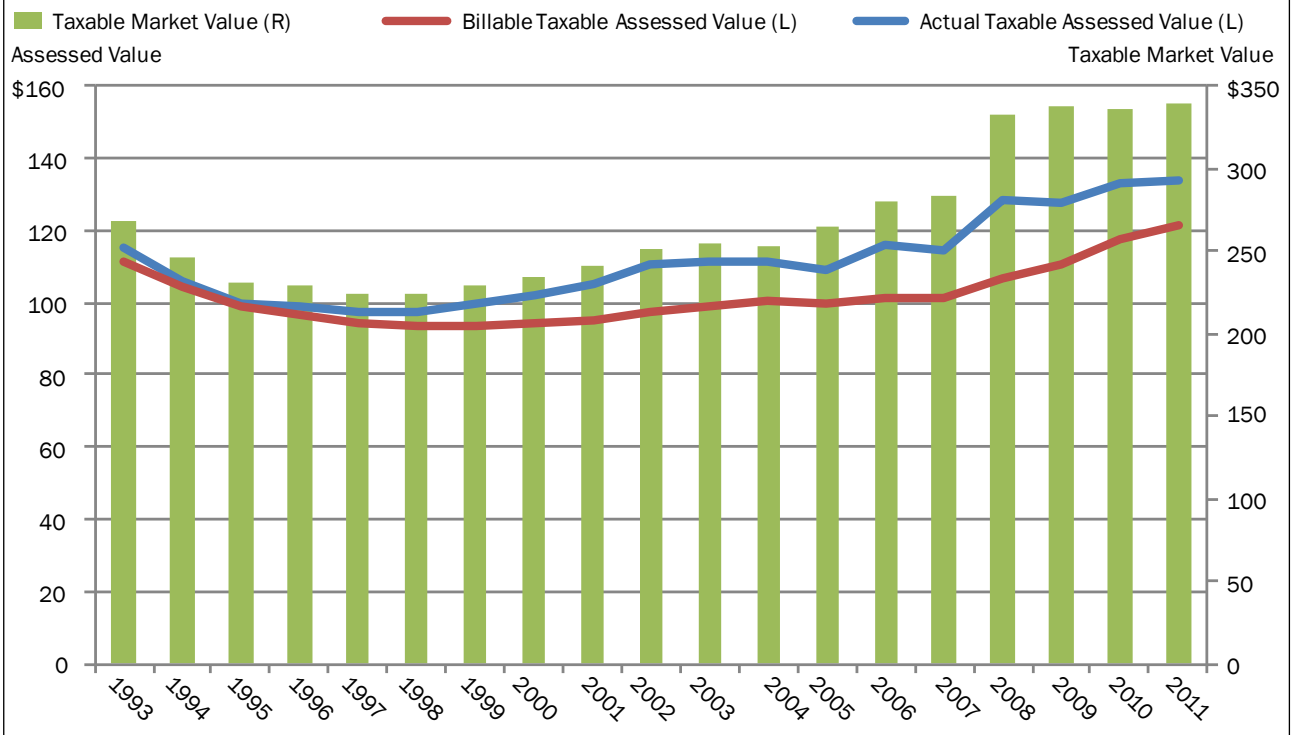
The chart on this page compares the aggregate billable taxable assessed value (the red line) with the actual assessed value shown as a blue line for the pipeline properties. The difference between the two is a rough approximation of the foregone assessed value being deferred in the pipeline that will be phased-in. The green bars shows the market value to demonstrate how, as the market value has grown, the difference between actual and billable assessed value has increased, especially in years with more rapid market appreciation.

For example, taxable market value of pipeline properties increased from $283.3 billion in 2007 to $332.1 billion in 2008, a 17.2 percent increase (real dollars). Actual taxable assessed value (set at 45 percent of market value) grew 12.2 percent and was equal to $114.8 billion in 2007 and $128.8 billion in 2008. Billable taxable assessed value grew from $101.2 billion to $106.8 billion, a much smaller increase of 5.5 percent. The slower billable taxable assessed value growth resulted from increases in assessed value that are in the pipeline and will phase in over the next four years. Conversely, when taxable market value was fairly flat from 2008 to 2011 (real dollars), an increase of just 2.3 percent or 0.8 percent a year on average, billable taxable assessed value grew 13.9 percent, or 4.4 percent a year, as prior year pipeline increases were being phased in.

How Do Assessment Caps and Target Assessment Ratios Work? Smaller residential properties, generally residential buildings with fewer than 11 units, are considered capped properties because there is a limit on how much their assessment can increase each year. Class 1 properties (one- to three-family homes and small condos) can increase in assessed value by a maximum of 6.0 percent a year and no more than 20.0 percent over five years. Capped properties in Class 2 (apartment buildings with 4-10 units, including coops and condos) can increase by up to 8.0 percent a year and a maximum of 30.0 percent over five years. Furthermore, Class 1 properties have a second

Pipeline Slows Growth of Billable Taxable Assessed Value Compared with Market Value and Actual Taxable Assessed Value in Classes 2 and 4

Dollars in billions (2011)



SOURCES: IBO; Department of Finance Recordbook file and other reports.
NOTES: Actual taxable assessed value is actual assessed value less exemptions. Billable taxable assessed value is the lower of actual taxable or transitional taxable assessed value, the latter calculated with a five-year phase in. Taxable market value is adjusted to reflect changes in exemptions and equals market value times ratio of exempt assessed value to total assessed value.

layer of protection. The target assessment ratio for these properties is 6.0 percent, meaning that their assessed value cannot exceed 6.0 percent of their market value. Recall that in the other classes, the assessment ratio is 45.0 percent.

The series of charts on page 8 show assessed value changes under different simulated rates of market value appreciation for a hypothetical Class 1 property such as a single-family home (for the illustration, assume that this is a newly built house). The city loses the fiscal benefit of market value growth when properties are gaining value more rapidly than the caps allow. With a 3.0 percent increase in market value each year, the assessed value increases by 3.0 percent a year and the summed increase over five years, 15.0 percent, is below the 20.0 percent cap. In this scenario, the city recognizes—or "captures"—all the growth in market value in the assessment and the property remains assessed at 6.0 percent of market value (the target ratio).

Once the annual appreciation exceeds 4.0 percent, the city loses the fiscal benefit associated with the increase in value, and this loss increases with more rapid appreciation. In the second simulation with 5.0 percent a year appreciation, the city recognizes the full increase for four years (summing to 20.0 percent). But assessed value in the fifth year remains the same as in the fourth because the appreciation in market value hit the five-year cap of 20.0 percent by the end of year four. As a result, the increase in market value is not reflected in the assessment. While the assessment ratio was at 6 percent through the first four years, it drops to 5.7 percent in the fifth year. The following year, the assessment can resume increasing, but depending on the rate of market value growth, the city may not be able to capture the foregone growth after year five.

Because of the Class 1 caps, the city's property tax assessments did not capture much of the run-up in market values during the recent real estate expansion. The fourth chart in the panel demonstrates how much growth was lost, simulating a sustained increase of 12.5 percent a year—the average annual market value increase in Class 1 from 1998 to 2008. During the first year of market value growth, assessed value would grow 6.0 percent while the remaining 6.5 percent would not be recognized. The same result would occur in the second and third year, bringing the three-year growth to a sum of 18.0 percent. In the fourth year, the assessed value would increase 2 percent and the rest of the growth would be unrecognized. In the fifth year, the assessment would not increase at all. During this period, the assessment ratio would decline, going from 6 percent to 5.7 percent after the first year and down to 4 percent after the fifth year.

Put another way, in this hypothetical example of a new home with a market value of $500,000 and an assessment ratio of 6.0 percent in 2006, assessed value for tax purposes reaches the same level in 2011, $36,445, regardless of whether market values rose 6.0 percent, 8.0 percent or even 12.5 percent a year. Without caps, the assessed value in 2011 would have been $44,080 with market value growth of 8.0 percent a year and $48,700 with market value growth of 12.5 percent a year.

If market values decline, however, some of the increases in market value that previously escaped taxation can be recaptured as taxable assessed value. Let us take a $500,000 house that appreciates at 12.5 percent a year as an example. After five years, the market value would be around $900,000, the assessed value would be about $36,500, and the assessment ratio would be 4.0 percent. Now suppose that market value declines by 10.0 percent to $810,000 the following year. Assessed value for tax purposes would increase by the maximum 6.0 percent allowed under the cap to $38,600 and at 4.8 percent of market value, the assessment is still below the target ratio. Even if the home's market value continues to decline, assessed value would continue to rise until the assessment ratio reaches the 6.0 percent target.

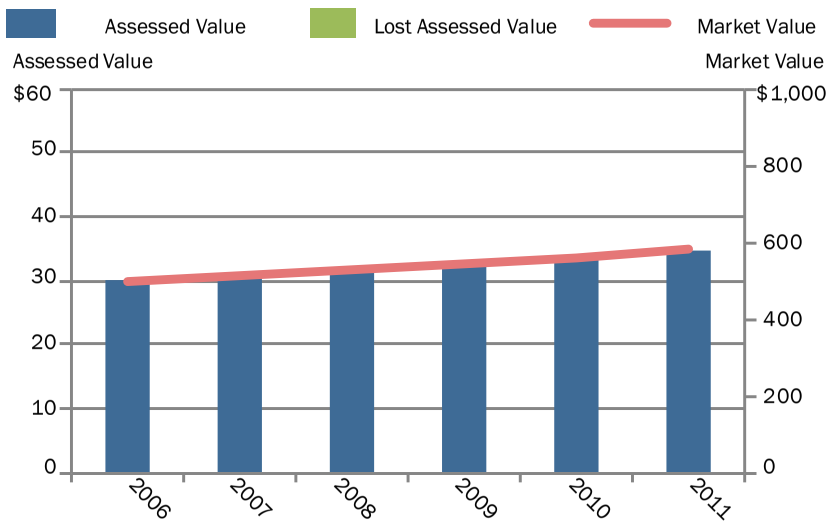
Historical Trends in Median Assessment Ratio of Class 1 Properties. This combination of assessment caps and target ratios explains why Class 1 homeowners saw their assessments increase more slowly than market value during the boom, and why, now that the boom is over, their assessments—and tax bills—have continued to increase even as market values have declined. The chart on page 9 demonstrates the negative relationship between market value growth and the median assessment ratio over time. (For reference, the target ratio, which was reduced gradually from 20.0 percent in 1984 to 6.0 percent in 2007, is also shown.)

During the 1990s, when inflation-adjusted market values were stagnant, the median assessment ratio was very close to the target. As market values began to grow, the median ratio began to decline (as the cap on annual increases left more and more homes with ratios below the target ratio). By 2006 the median assessment ratio was just 4.4

Illustration of Uncaptured Market Value Growth When Annual Appreciation Exceeds 4 Percent a Year in Class 1

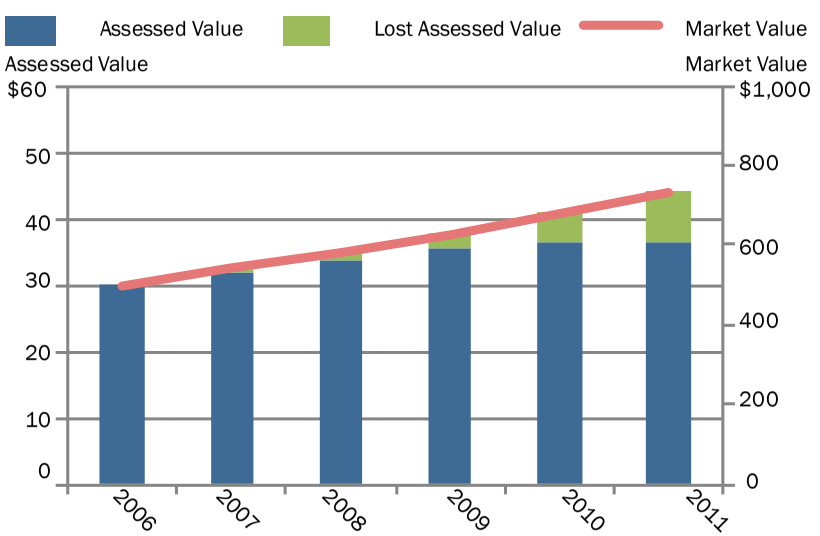
3 Percent Annual Appreciation

Dollars in thousands



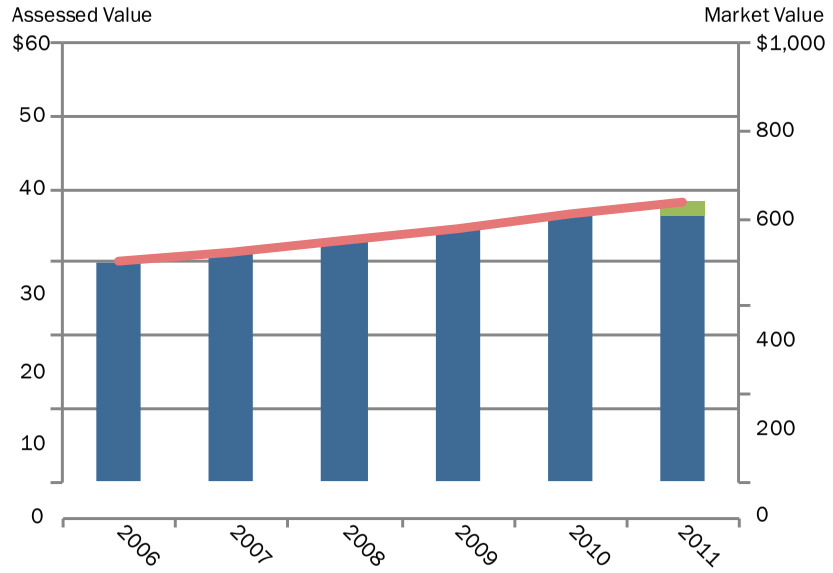
8 Percent Annual Appreciation

Dollars in thousands



5 Percent Annual Appreciation

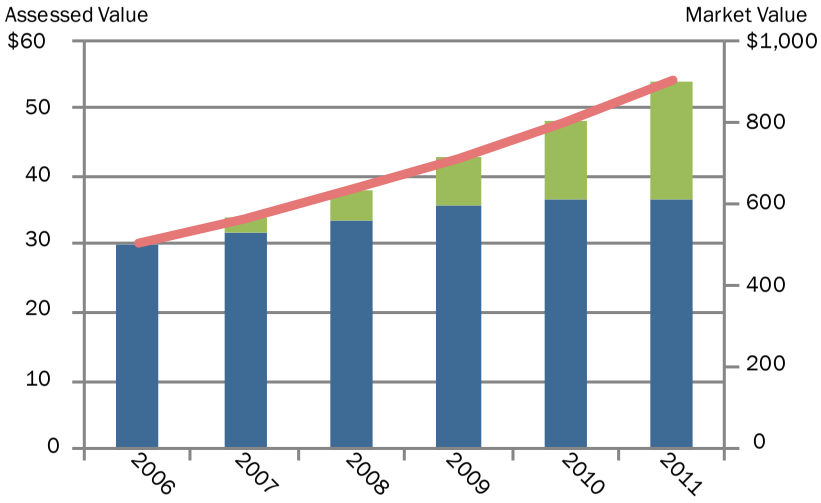
Dollars in thousands



12.5 Percent Annual Appreciation

Uses Class 1 actual average market value growth from 1998 to 2008

Dollars in thousands



SOURCES: IBO; Department of Finance Recordbook and other reports

percent, compared with a target of 8 percent. The median ratio continued to decline in 2007 and 2008, as market values continued to rise. Once the market started to decline in 2009, the median assessment ratio started to increase, as assessed value began to recoup the growth of the earlier years. The median ratio increased from low of 3.6 percent in 2008 to 4.4 percent by 2010 and 4.8 percent in 2011.

The tentative roll for 2012, released in January 2011 showed a 0.9 percent increase in market value. Such tepid market value growth, coupled with what continues to be a below target median assessment ratio led to stronger growth in billable taxable assessed value at 2.7 percent, although IBO forecasts that on the final assessment roll—following tax challenges and other adjustments—the increase in billable taxable assessed value will be less, about 2.1 percent. IBO expects this increase will also correspond with a slight increase in the median assessment ratio in Class 1, to about 4.9 percent.

The Pipeline for the Real Property Tax in 2011

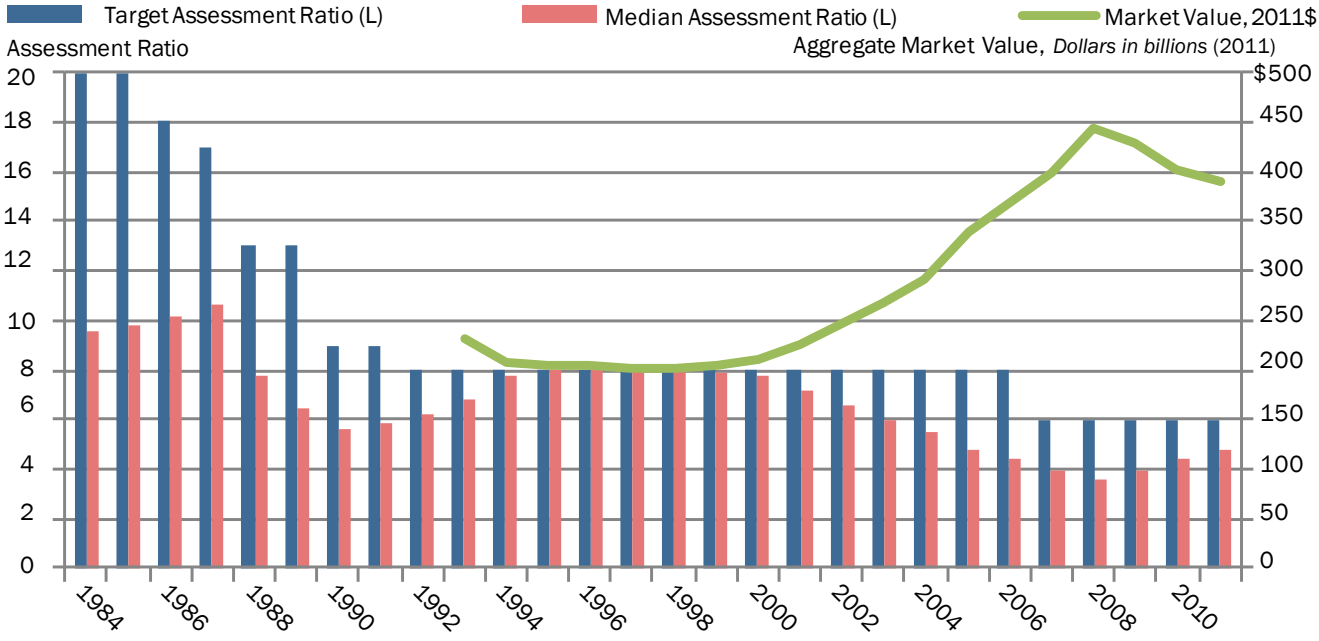
The pipeline represents the accumulated equalization changes from the prior four years plus the current year's changes that will be phased in.[6] For example, at the start of 2011, the pipeline would contain equalization increases from 2007 through 2010 that are to be phased in plus the new equalization changes from 2011. Similarly, to estimate the assessed value in the pipeline back in 2007, we need to consider equalization changes from 2003 through 2007. All estimates in this section are IBO projections based on individual parcel-level assessment data from 2003 through 2011.[7]

The trajectory of the Class 2 and Class 4 pipelines over the last six years shows significant declines since 2008, with 2011 levels below that of 2006. The significant bump seen in 2008 resulted not only from market value appreciation, but also from Department of Finance policy decisions regarding methods for determining market value.

The Class 4 pipeline is generally larger than Class 2. While the Class 4 pipeline was estimated to be 20 percent larger than Class 2 in 2006 ($6.1 billion and $5.0 billion, respectively), by 2011, IBO estimates that the Class 4 pipeline was twice the size of Class 2 (although the amounts were smaller, at $2.2 billion for Class 2 and $4.5 billion for Class 4).

The 2012 tentative assessment roll suggests fairly strong growth in market value in Classes 2 and 4, which should reverse the rapid decline in the pipeline of the last few years. In Class 2, once capped properties are excluded, market values grew 12.8 percent on the tentative roll. Billable taxable assessed value grew a little more slowly, at 8.5 percent, although IBO expects that to decline to 7.6 percent in the final roll, as a result of assessment challenges and adjustments by property owners. In Class 4, increases in median income as well as lower capitalization

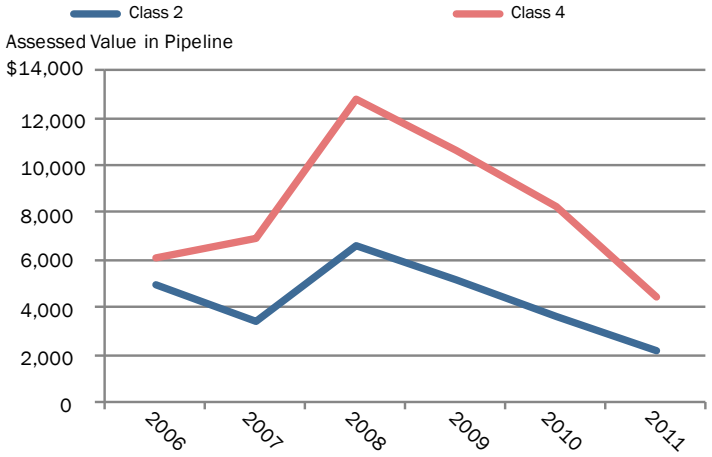
In Class 1, When Market Value Was Growing, the Median Assessment Ratio Declined, Until the Trend Reversed in 2008



SOURCES: IBO; Department of Finance Recordbook and other reports

IBO Estimates of the Assessed Value in the Class 2 and 4 Pipelines, 2006-2011

Dollars in millions



SOURCES: IBO; Department of Finance Real Property Assessment databases, various years.

rates (compared with last year) led to aggregate market value growth of almost 10.0 percent. The increase in billable taxable assessed value was 7.3 percent, although IBO expects that to come down on the final roll, to about 5.6 percent. Nonetheless, because the pipeline represents a phase-in from the four preceding years, recovery of the pipeline will lag recovery of the real estate market.

Detailed Look at the Pipeline. This section looks more closely at how the pipeline built up though 2008 and bolstered billable assessed value during the economic contraction. The charts, on pages 11 and 12, Annual Components of the Pipeline for Class 2 and Class 4, provide a historical presentation of the total equalization change, the annual phase-in added to the pipeline each year, and the total assessed value in the pipeline, allowing us to see how a particular year's assessed value change gets spread out over a five-year period.[8]

Reading the Pipeline Charts. The phase-in bar for 2007 has five segments, for 2003 through 2007. Each segment represents one-fifth of that year's equalization change which would have been phased-in with the 2007 tax roll. In 2007, for example, assessed value increased by $2.2 billion in Class 2 as a result of the pipeline phase-in. In 2008, the five segments represent 2004 through 2008 (in essence, 2003 drops out and is replaced by 2008).

The second panel, the pipeline bars, represents the flip-side: as more of the increase in market value is included in taxable assessments each year, the pipeline of accrued market value increases is drawn down. The 2007 bar has four segments, for 2004 through 2007, and represents the amount left in the pipeline after the phase-in has been added to the parcels. The pipeline is equal to 80.0 percent of the equalization change in the current year (in this example, 2007), 60.0 percent of the prior year (2006), 40.0 percent of the year before that (2005), and 20.0 percent of the preceding year (2004). Over time, the share of each year's equalization change remaining in the pipeline decreases as it is phased-in. For example, the dark blue segment in 2007 (the longest) decreases in 2008, 2009, and 2010. By 2011, that bar is gone because all the equalization changes from 2007 have been phased-in and none remains in the pipeline.

The tables present the same data, but numerically rather than graphically. When reading across, one sees how a single year's equalization change is gradually phased in over time. The row for 2007, in the Class 2 pipeline history table, shows an equalization change of $208 million. This increase would have phased in at one-fifth each year ($42 million a year), for 2007 through 2011, as shown in the phase-in columns. The pipeline columns show how what is left over after the phase in declines gradually. For example, in 2007 the phase-in of $42 million and the pipeline $166 million sum to the full addition of $208 million. In 2008, the phase-in of $42 million in 2008, the phase-in of $42 million in 2007, and the 2008 pipeline value of $125 million sum to the full addition of $208 million (does not add due to rounding). Summing the annual phase-in columns vertically tells us how much was moved from the pipeline to assessed value in a given year.

Status of the Class 2 Pipeline. A closer look at the Class 2 pipeline from 2006 through 2011 shows that while annual equalization changes fluctuated from $208 million in 2007 to $5.6 billion in 2008, the annual phase-in was more steady, ranging from $1.6 billion in 2011 to $2.5 billion in 2010. The value remaining in the pipeline for phase-in in 2012 and beyond has declined, with $2.2 billion estimated in the pipeline in 2011, compared with a high of $6.6 billion in 2008.

The aggregate value in the pipeline in 2006 was about $5.0 billion. The pipeline decreased in 2007 to $3.4 billion, as the equalization change from 2007 did not offset the phase-in of prior years. There was significant equalization change in 2008—the full amount recognized in 2008 was $5.6 billion. Adding 80 percent of that to the pipeline, net decreases from prior years that were phased in for the 2008 tax roll, resulted in a pipeline of $6.6 billion in 2008—almost double the previous year.

In 2008, DOF instituted a new policy regarding buildings that did not file their required income and expense reports that led to significant increases in market value. To give building owners an incentive to file the required reports, DOF used the highest comparable income and lowest comparable expenses for nonfilers, essentially giving them the highest possible net operating income, which is used in setting most Class 2 market values. This administrative change led to a big jump in market value, which is reflected in the large addition to the pipeline in 2008.

The equalization changes for 2009 and 2010 were much smaller, $1.0 billion and $0.9 billion, respectively; as a result, the value in the pipeline has declined to $5.2 billion in 2009 and $3.6 billion in 2010. With the recession dulling investors' enthusiasm for New York apartment buildings, the equalization increase in 2011 was just $196 million. As a result, the pipeline declined again, to $2.2 billion in 2011.

Status of the Class 4 Pipeline. As with Class 2, the annual phase-in of the pipeline in Class 4 is less volatile, ranging from $2.5 billion in 2006 to $4.9 billion in 2010, than the annual equalization change which ranged from a decline of $30 million in 2011 to an increase of $10.3 billion in 2008. The Class 4 pipeline peaked in 2008 at $12.9 billion before reaching its six-year low of $4.5 billion in 2011. The general trend with the Class 4 pipeline is similar to Class 2, with one significant exception—the 2007 equalization increase

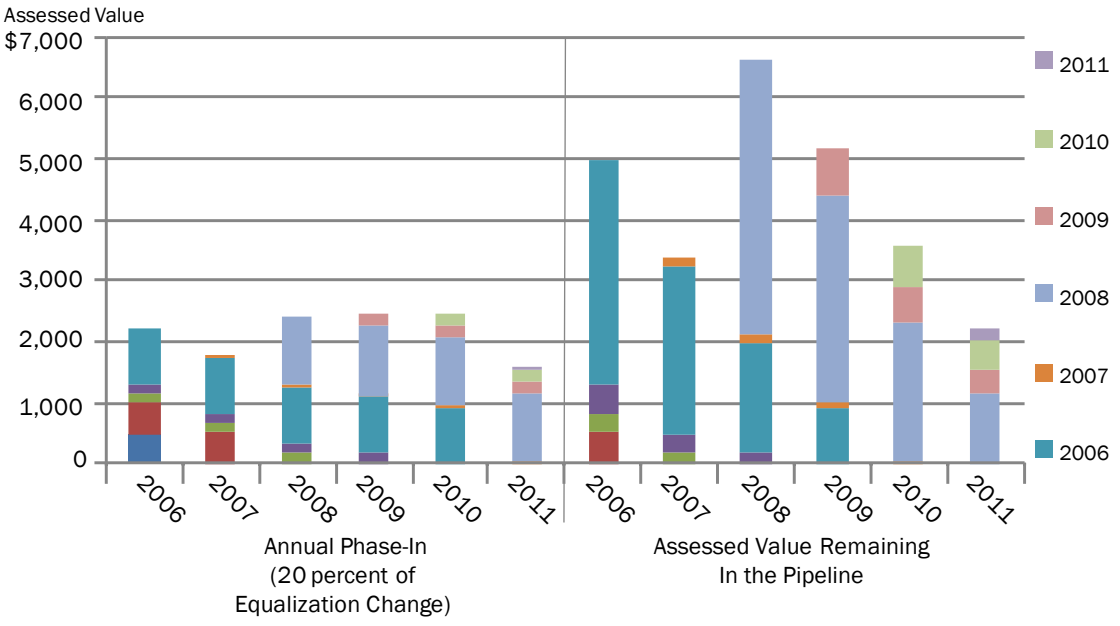
Class 2 Pipeline History

Dollars in millions

	Equalization Change	Annual Phase-In						Assessed Value Remaining in the Pipeline					
		2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
2002	$2,422	$484											
2003	$2,463	$493	$493					$493					
2004	$820	$164	$164	$164				$328	$164				
2005	$793	$159	$159	$159	$159			$476	$317	$159			
2006	$4,587	$917	$917	$917	$917	$917		$3,669	$2,752	$1,835	$917		
2007	$208		$42	$42	$42	$42	$42		$166	$125	$83	$42	
2008	$5,624			$1,125	$1,125	$1,125	$1,125			$4,499	$3,374	$2,249	$1,125
2009	$979				$196	$196	$196				$783	$587	$392
2010	$874					$175	$175					$700	$525
2011	$196						$39						$156
TOTAL		**$2,217**	**$1,774**	**$2,406**	**$2,438**	**$2,454**	**$1,576**	**$4,966**	**$3,400**	**$6,617**	**$5,158**	**$3,578**	**$2,197**

Annual Components of the Class 2 Pipeline

Dollars in millions



SOURCE: IBO; Department of Finance Real Property Assessment databases, various years and other reports.

was more substantial in Class 4 leading to an increase in the pipeline in 2007, rather than a decrease.

As in Class 2, the equalization increase added to the pipeline in 2008 was very large, at $10.3 billion, much of it probably resulting from DOF's policy change regarding buildings with missing income and expense statements. With smaller equalization increases of $2.4 billion a year added to the pipeline in 2009 and 2010, the pipeline has been declining since then. IBO estimated the pipeline was at $10.7 billion in 2009 and $8.2 billion in 2010.

In 2011, equalization decreases exceeded equalization increases and the net equalization change in Class 4 was a *decrease* of $30 million. As a result, the estimate of the pipeline in 2011 is $4.5 billion, a 45 percent reduction from the 2010 value of the pipeline.

CONCLUSION

The structural features of the city's real property tax serve to keep assessments stable over time. Through a variety of mechanisms, changes in taxable market value are only

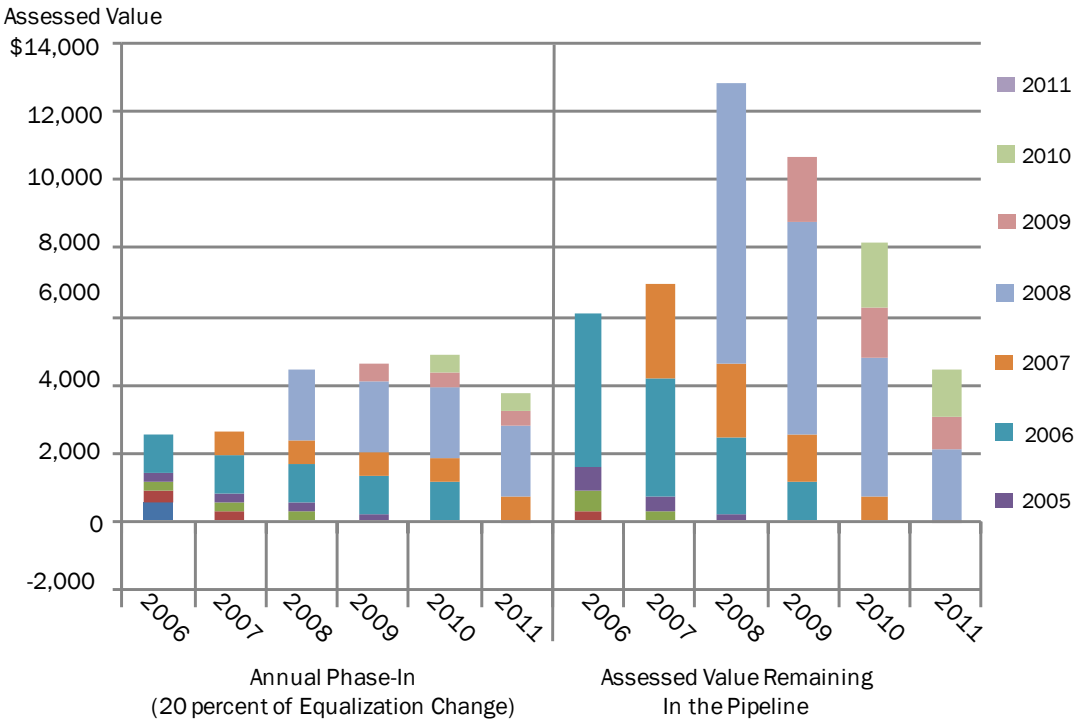
Class 4 Pipeline History

Dollars in millions

	Equalization Change	Annual Phase-In						Assessed Value Remaining in the Pipeline					
		2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
2002	$2,914	$583											
2003	$1,362	$272	$272					$272					
2004	$1,583	$317	$317	$317				$633	$317				
2005	$1,070	$214	$214	$214	$214			$642	$428	$214			
2006	$5,690	$1,138	$1,138	$1,138	$1,138	$1,138		$4,552	$3,414	$2,276	$1,138		
2007	$3,494		$699	$699	$699	$699	$699		$2,795	$2,096	$1,397	$699	
2008	$10,330			$2,066	$2,066	$2,066	$2,066			$8,264	$6,198	$4,132	$2,066
2009	$2,434				$487	$487	$487				$1,947	$1,461	$974
2010	$2,399					$480	$480					$1,920	$1,440
2011	$(30)						$(6)						$(24)
TOTAL		**$2,524**	**$2,640**	**$4,433**	**$4,603**	**$4,869**	**$3,725**	**$6,100**	**$6,953**	**$12,850**	**$10,680**	**$8,211**	**$4,455**

Annual Components of the Class 4 Pipeline

Dollars in millions



SOURCES: IBO; Department of Finance Real Property Assessment databases, various years and other reports.

gradually reflected in the taxable assessments and the levy. As a result, property tax assessments are less volatile then the market, both on the upside and downside. The city's aggregate assessed value was stagnant, and even declined, during the major real estate contraction in the early 1990s and subsequent period of flat property values. During the recent real estate boom, the property tax assessments grew, but not as rapidly as taxable market values. As we entered a contraction, the stabilizing features of the property tax kept aggregate assessed value growing even as taxable market values began to contract. The tentative property tax roll for 2012, released in January 2011, shows that market values are resuming growth in Class 1 and showing fairly strong growth in Classes 2 and 4.

The major structural feature that moderates change in taxable assessments is the pipeline, whereby changes in market value for certain buildings are recognized over a five-year window. This feature is fiscally more important than caps in Class 1 because more than 75 percent of assessed value is for properties benefiting from the pipeline. IBO estimates that the pipeline has shrunk to $6.7 billion in 2011, down from $11.8 billion in 2010 and $19.4 billion at its peak in 2008. With the pipeline already reduced so dramatically, the additional assessments waiting to be phased-in would not have been adequate to buttress assessments during a prolonged contraction or stagnation. However, the strong market value growth seen on the tentative assessment roll for 2012, 12.8 percent in Class 2 and 10.0 percent in Class 4, which is expected to decline slightly before the roll is finalized in May 2011, should begin to restore the pipeline.

The target assessment ratio and caps on increases in assessed value for smaller residential properties also moderate property tax assessment changes. The caps constrained assessed value growth during the real estate expansion, but during the real estate contraction, they worked in reverse and led to growth in assessed value—and tax bills. While we expect only modest market value growth in 2012 for these properties, billable assessed value will grow more strongly as the city recoups foregone assessed value growth during the expansion.

Report prepared by Ana Champeny

Endnotes

[1]Another reason for the stability of the property tax is the methodology used to assess income-producing properties, specifically commercial buildings and residential rental buildings. In most cases, market values for these buildings are determined using building income. Long-term leases in commercial buildings also minimize fluctuations in annual income because a small share of leases are likely to be up for renewal in a given year. For residential rental buildings, rent regulation increases cap the rate at which rental income can grow, thereby moderating the Department of Finance market value estimate. However, this paper does not consider the implications of the assessment methodology, focusing instead on how the changes in market value translate into changes in taxable assessments and by extension, tax revenue.
[2]Section 581 of the state real property tax law requires that the city assess cooperative buildings and condominiums based on their projected income as rental buildings rather than sales.
[3]In this context, the assessed value refers to the actual assessed value, rather than the transitional assessed value. See the section of this report How Do Assessments Work for Pipeline Properties for a more detailed discussion of the difference between these two assessed values and how they are calculated for properties in Classes 2 and 4.
[4]In order to compare taxable assessed value to market value, IBO adjusted the market value to exclude the proportional share of market value that is exempt. The result is an estimate of taxable market value. This adjustment allows us to compare assessments to market value without distortion from exemption trends.
[5]There is a situation when an equalization change would not be added to the pipeline, but rather recognized fully. This occurs if the equalization change is negative and there is no existing market value increase (from the preceding four years) already in the process of being phased in. In other words, an equalization decrease after four consecutive years of decreases or flat market value would be recognized immediately.
[6]Because assessed value in the pipeline is added to the transitional assessed value of a property and properties are taxed on either actual or transitional assessed value, whichever is lower, in some cases the value being phased-in is not reflected in the billable assessed value. For example, if the decline in market value is steep enough that the actual assessed value is lower than the transitional, the property would switch to using the actual assessed value. Generally, during market value growth, a larger share of properties uses their transitional assessed value and as market values decline, that share also declines.
[7]Data limitations prevented IBO from adjusting the pipeline for any retroactive changes to property assessments that result from tax assessment challenges by property owners, although such changes are not large in the aggregate. As such, IBO's estimate of the pipeline is an upper bound.
[8]Equalization change from prior years that is phasing in is based on properties assigned to Class 2 or Class 4 in 2011. For example, if a parcel was reclassified from Class 2 to Class 1 in 2011, its prior history is not included in the estimate of the pipeline for Class 2.