DRA REPORT ON REVIEW OF ASSESSMENT PRACTICES FOR MUNICIPALITY OF

MANCHESTER

For the Property Tax Year Beginning APRIL 1, 2004
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OBJECTIVE

Pursuant to RSA 21-J:11-a, the NH Legislature identified five areas of assessing practices for the commissioner of the Department of Revenue Administration (DRA) to review and report on:

A. Whether the level of assessments and uniformity of assessments are within acceptable ranges as recommended by the assessing standards board by considering, where appropriate, an assessment-to-sales-ratio study conducted by the department for the municipality;

B. Whether assessment practices substantially comply with applicable statutes and rules;

C. Whether exemption and credit procedures substantially comply with applicable statutes and rules;

D. Whether assessments are based on reasonably accurate data; and,

E. Whether assessments of various types of properties are reasonably proportional to other types of properties within the municipality.

DRA METHODOLOGY

EQUALIZATION STATISTICS

Each year the DRA conducts sales-to-ratio studies known as the Equalization Survey in accordance with procedures recommended by the Equalization Standards Board (ESB). These equalization statistics are used in this report to determine whether the level and uniformity of assessments are within acceptable ranges in accordance with guidelines established by the Assessing Standards Board (ASB).

SAMPLING

When a statistically valid sample is obtained, it is possible to determine, with a stipulated degree of confidence that the number of errors in the sample applies proportionally to the non-sampled portion as well. The department utilized the statistical sampling program of the US Office of Audit Services to determine the appropriate sample size of records to be examined.

TESTING

Department Review Appraisers examined the selected samples to determine if there was substantial compliance with applicable statutes and whether assessments of various types of properties were reasonably proportional to other types of properties within the municipality. Our determination and recommendations follow.
**A. LEVEL AND UNIFORMITY OF ASSESSMENTS**

**ASB GUIDELINE:** Level of assessments and uniformity of assessments are within acceptable ranges as recommended by the Assessing Standards Board by considering, where appropriate, an assessment-to-sales-ratio study conducted by the department for the municipality.

- A median ratio should be between 0.90 and 1.10 with a 90% confidence level in the year of the review.
- An overall coefficient of dispersion (COD) for the municipality’s median ratio should not be greater than 20.0 without the use of a confidence interval.

**DRA Methodology:** To determine compliance with these guidelines, the DRA relied on statistics from the 2004 Equalization Survey. (See Appendix D, 2004 Assessment Review Summary.)

**DRA Determination:** The results of the 2004 NH Department of Revenue Administration Equalization Survey for Manchester for April 1, 2004 are:

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<th>2004 Median Ratio with Confidence Range:</th>
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<td>56.0</td>
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<td>56.8</td>
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2004 COD 15.5

Manchester did not meet the guidelines for level of assessments. Manchester did meet the requirements for uniformity of assessments.

**DRA Recommendation:** Manchester is currently conducting a full revaluation for 2006. When successfully completed we suggest the city request another assessment review for 2006 that would place it on a revised 5-year cycle.

**Municipality’s Response:** “The City of Manchester is in the process of completing the full revaluation for tax year 2006, and will request assessment review for that year. This action will make coincidental all statutory and assessment review requirements.”

**B. ASSESSING PRACTICES**

**SHALL SUBSTANTIALLY COMPLY WITH APPLICABLE STATUTES AND RULES**

**B1. ASB GUIDELINE:** All records of the municipality’s assessor’s office should be available to the public pursuant to RSA 91-A.

**DRA Methodology:** To determine whether all records of the assessor’s office were available to the public, the DRA requested any written guidelines that Manchester had that addressed this issue. Absent the existence of any written guidelines, the DRA then specifically asked the city personnel what records were available to the public, and which specific records, if any, were not generally made available.
**DRA Determination:** Based upon our review and personal observations, while working in the city, there was no apparent evidence that the public was denied access to public documents. Manchester meets the guidelines for public documents available to the public.

**DRA Recommendation:** None

**Municipality’s Response:** None

**B2. ASB GUIDELINE:** Ninety-five percent of the property records in the sample reviewed by the DRA should reflect assessments of properties as of April 1, pursuant to RSA 74:1; and that a municipality should not assess parcels or new construction that did not exist as of April 1 of that tax year.

**DRA Methodology:** To determine if property records properly reflected values as of April 1, 2004, and that new parcels or new construction not in existence as of April 1, 2004, were not being assessed, the DRA selected a random sampling of properties to review.

**DRA Determination:** A review of these properties confirmed that in all cases the values did reflect new construction that existed as of April 1, 2004, and that there was no evidence that any new parcels or new construction that occurred after April 1, 2004, were being assessed for 2004. Based upon this review, Manchester is in compliance with this guideline.

**DRA Recommendation:** None

**Municipality’s Response:** None

**B3. ASB GUIDELINE:** A municipality should have a revised inventory program in place that addresses compliance with RSA 75:8, which provides that annually, and in accordance with state assessing guidelines; assessors and selectmen shall adjust assessments to reflect changes so that all assessments are reasonably proportional within the municipality.

**DRA Methodology:** To determine whether there was a revised inventory program in place, the DRA first requested any written guidelines that Manchester had in this regard. Absent the existence of any written guidelines, the DRA reviewed the requirements under RSA 75:8 with the city personnel to determine the city’s actual practice.

**DRA Determination:** Based upon our review in this area, and our conversation with the city personnel, the DRA has determined that Manchester does not have a program in place, which, if adhered to, will result in the annual adjustment of assessments necessary to maintain reasonable proportionality among all properties. Based on our review, Manchester is not in substantial compliance with this guideline, although they are in the process of doing a full revaluation for 2006.

**DRA Recommendation:** The city should have a written procedure for annual updating, if necessary.
Municipality’s Response: “After the completion of the tax year 2006 revaluation, the Assessors will be annually reviewing various strata to ensure compliance with RSA 75:8. The Assessors are in the process of formulating this concept into a formal policy, and will be prepared to comply with this guideline at the time of our next assessment review (2006).”

B.4. ASB GUIDELINE: In accordance with RSA 31:95-a, a municipality’s tax maps should:

a. Show the location of each property drawn to scale;
b. Be updated annually; and
c. Include an index of each parcel by the property owner’s name and parcel identifier.

DRA Methodology: To determine the adequacy of the tax maps, the DRA selected a random sampling of properties. These properties were located on the city’s tax maps, and reviewed to determine if they were in their proper location and drawn to scale.

DRA Determination: Of the properties reviewed, all were located properly and drawn to the proper scale. Based upon this review of the tax maps, the DRA has determined that Manchester is in compliance with this guideline. In addition, the DRA verified the existence of an in-house cartographer (GIS) doing annual updating. The existence of current indices of owner’s name and parcel identifier were available to the public.

DRA Recommendation: None

Municipality’s Response: None

B.5. ASB GUIDELINE: Eighty-five percent of the current use property records in the sample reviewed by the DRA should have:

a. A timely filed Form A-10, Application for Current Use Assessment (RSA 79-A:5 and Cub 304);
b. If applicable, a timely filed Form CU-12, Summary of Forest Stewardship Plan for Current Use Assessment (RSA 79-A:5 and Cub 304.03);
c. Current use valuations assessed in accordance with Cub 304; and
d. A procedure to determine, prior to July 1 of each year, if previously classified land has undergone a change in use for purposes of assessing the Land Use Change Tax (RSA 79-A:7).

DRA Methodology: To determine if current use properties were properly documented and valued, the DRA selected a random sampling of current use properties. The records for these properties were reviewed to determine if the appropriate Form A-10, Application for Current Use Assessment and Form CU-12, Summary of Forest Stewardship Plan for Current Use Assessment (if required) were on file. In addition, the current use values assigned to these properties were reviewed to insure that the assessments were within the valuation ranges established by the Current Use Board and consistent with Cub 304. The DRA also determined if Manchester had a
procedure in place to identify if previously classified current use land had undergone a change in use for the purpose of assessing the Land Use Change Tax.

**DRA Determination:** Based upon the DRA review of current use practices, 66.67% were found to meet the guideline criteria. Therefore it appears that Manchester has not complied with this guideline.

**DRA Recommendation:** Manchester should review all current use records and request missing Form A-10 applications and maps for tax year 2005. Manchester should also update all current use values in accordance with CUB 304 as described in the ASB Guidelines for tax year 2005.

**Municipality’s Response:** “The City has a very small number of properties in Current Use, and the non-complying properties are ones that entered this program at or near its inception. The Assessors are in the process of notifying affected taxpayers of additional information now required and will be prepared to comply with this guideline at the time of our next assessment review (2006).”

**B.6. ASB GUIDELINE:** In accordance with RSA 21-J:11, all appraisal service contracts or agreements in effect during the assessment review year for tax assessment purposes should:

a. Be submitted to the DRA, prior to work commencing, as notification that appraisal work shall be done in the municipality; and
b. Include the names of all personnel to be employed under the contract.

**DRA Methodology:** To determine if appraisal contracts or agreements in effect for 2004 had been submitted to the DRA, along with the names of all personnel to be employed under the contract, the DRA verified that the contracts and the list of personnel were in the city’s permanent file in the DRA office.

**DRA Determination:** A review of the city’s permanent file indicated that for assessment review year 2004 there were no contract awarded to any assessment contractors, although there is a contract in place for a full measure and list revaluation for 2006 with Vision Appraisal Technologies with all necessary documentation and lists. Based upon that verification, Manchester is in compliance with this guideline.

**DRA Recommendation:** None

**Municipality’s Response:** None

**C. EXEMPTIONS AND CREDITS:**

**C.1. ASB GUIDELINE:** A periodic review should be done by the municipality of all exemptions and credits at least once every assessment review cycle. Municipalities scheduled for assessment review in 2004 should perform the review of all exemptions and credits by December 31, 2004.
C.2. ASB GUIDELINE: The municipality should have on file a current Form BTLA A-9, List of Real Estate and Personal Property on Which Exemption is Claimed, as described in Tax 401.04(b) for all religious, educational and charitable exemptions.

C.3. ASB GUIDELINE: The municipality should have on file a current form BTLA A-12, Charitable Organization Financial Statement, as described in Tax 401.01(c), for all charitable exemptions.

DRA Methodology: To determine whether Manchester met these guidelines, the DRA conducted a random sampling of properties that had been granted a religious, educational, or charitable exemption. A review was then made of the records for those properties to determine if a current Form BTLA A-9 was on file, and in the case of a charitable exemption, if a current Form BTLA A-12 was on file. In addition, the DRA reviewed documentation supplied by the city personnel to determine if exemptions and credits had been reviewed for this assessment review cycle and to insure that proper documentation existed to justify the exemption or credit granted. This documentation consisted of reviewing the PA 29s with notation of a date and initial by the Assessor for the review.

DRA Determination: Based upon our review, Manchester had not reviewed exemptions and credits and as such does not comply with these guidelines. In addition, a review of the religious, educational, and charitable properties indicated that the current Form BTLA A-9 or Form BTLA A-12 was on file and Manchester is in substantial compliance with the guideline for Religious, Educational, and Charitable Exemptions, however not for other exemptions and credits.

DRA Recommendation: Review all exemptions and credits prior to the finish of the revaluation.

Municipality’s Response: With respect to ASB guideline C.1: during the completion of the tax year 2006 revaluation, the Assessors will be reviewing all exemptions and credits granted. The Assessors are in the process of formulating a formal policy to review exemptions and credits in every assessment review year, and will be prepared to comply with this guideline at the time of our next assessment review (2006). No comment with respect to ASB guideline C.2 and C.3.

D. ACCURACY OF DATA:

D.1. ASB GUIDELINE: The municipality should have no material errors on at least eighty percent of the property record cards reviewed by the DRA. A material error is defined to be any error or combination of errors that results in a variance greater than 5% of the total assessed value of the property; and includes, but is not limited to:

a. Mathematical miscalculations;
b. Inconsistent land values without notation or documentation;
c. Inconsistent depreciation without notation or documentation;
d. Inconsistent neighborhood adjustments without notation or documentation;
e. Market adjustments without notation or documentation; 
f. Acreage noted that does not match the tax map unless otherwise noted; 
g. Omission of data such as, but not limited to; 
   i. Addition of improvements; 
   ii. Removal of improvements; 
   iii. Conversion of improvements; 
h. Erroneous measurements resulting in a square foot variance of 10% or more of the primary improvement(s).

**D.2. ASB GUIDELINE:** The level of accuracy of the data elements should be determined by the DRA by comparing the information regularly collected by the municipality on a sample of property record cards with the actual property. Prior to commencement of the review process, the DRA should meet with the municipality’s assessing officials to obtain an understanding of the municipality’s data collection techniques used to determine value and the data elements regularly collected by the municipality that are included on the municipality’s property record cards.

**DRA Methodology:** To determine if Manchester’s assessments were based on reasonably accurate data, the DRA conducted a random sampling of properties. A field review was conducted to compare the data on the property record cards with the actual property. Whenever possible, the DRA verified both the interior and exterior information. Of the properties sampled, all had the exterior reviewed, and a little less than half had interior inspections.

DRA verified the accuracy of the city’s data in the two areas specified in the ASB guideline. First, the DRA checked for any material errors, or those errors resulting in a variance of greater than 5% of the total assessed value of the property. And second, the DRA verified the overall accuracy of all of the data elements regularly collected by Manchester.

**DRA Determination:** The result of that review indicated that of the property record cards in the sample there appeared to be two material errors in excess of 5% on all of the cards, for 94.29% accuracy. Manchester is reasonably compliant with this guideline, as the accuracy is within the recommended guidelines set by the Assessing Standards Board.

As a matter of reporting only, the DRA found that of the property record cards reviewed in the field all had fewer than 5 data element discrepancies.

**DRA Recommendation:** None

**Municipality’s Response:** None

**E. PROPORTIONALITY:**

**E.1. ASB GUIDELINE:** The municipality’s median ratio with a 90% confidence level for the following 3 strata should be within 5% of the overall median ratio (point estimate):
   a. Improved residential up to and including 4-family units;
b. Improved non-residential;
c. Unimproved properties.

**E.2. ASB GUIDELINE:** No ratio should be calculated for a particular stratum unless a minimum of 8 sales is available in that stratum. If no ratio has been calculated, the sales should not be collapsed into another strata.

**E.3. ASB GUIDELINE:** The DRA should calculate the municipality’s price related differential (PRD) with a 90% confidence level and report the PRD to the municipality and the ASB.

**DRA Methodology:** To determine compliance with these guidelines, the DRA relied on statistics from the 2004 Equalization Survey. (See Appendix D, 2004 Assessment Review Summary.)

**DRA Determination:**

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<th>Low</th>
<th>Median</th>
<th>High</th>
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<td>2004 Improved Residential</td>
<td>56.4</td>
<td>56.8</td>
<td>57.3</td>
</tr>
<tr>
<td>2004 Improved Non-Residential</td>
<td>50.3</td>
<td>51.9</td>
<td>53.9</td>
</tr>
<tr>
<td>2004 Unimproved Property</td>
<td>31.6</td>
<td>34.8</td>
<td>39.3</td>
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Manchester does not comply with this guideline, as the median ratio with a 90% confidence interval for the calculated strata does not fall within 5% of the overall median ratio of 56.4 for Unimproved Property.

As a matter of reporting only, the PRD for Manchester, using a 90% confidence level, shows a point estimate of 1.00 with a confidence interval from .99 to 1.01.

**DRA Recommendation:** A full revaluation is needed to bring the strata to within the acceptable range.

**Municipality’s Response:** “The City of Manchester is in the process of completing the full revaluation for tax year 2006, and will request assessment review for that year. This action will make coincidental all statutory, Constitutional and assessment review requirements.”
APPENDIX A - ASSESSING STANDARDS BOARD GUIDELINES

I. The following guidelines are recommended by the Assessing Standards Board (ASB) in accordance with the provisions of RSA 21-J:14-b and RSA 21-J:11-a. These guidelines will be used by the Department of Revenue Administration (DRA) to measure and analyze the political subdivision for reporting to the Municipality and the ASB. These guidelines assist the Commissioner to determine the degree to which assessments of a municipality achieve substantial compliance with applicable statutes and rules.

II. Pursuant to laws of 2004, Chapter Law 307, section 5, “The general court recognizes all the work in creating a set of proposed standards for the certification of assessments. There is reason for concern, however, that these standards may have an inequitable impact on municipalities within the state due to differences between municipalities in such characteristics as size, parcel count, number of sales, and geographic location. Therefore, the general court finds that in order for the state to continue to implement fair and equitable assessing practices, it is necessary to further analyze the assessing practices of the state’s political subdivisions. This analysis can be accomplished by using the assessing standards board’s recommended standards as guidelines for a measurement tool, rather than as certification requirements, in the first 4 years of the process. The results of measuring these guidelines can then be analyzed for the state’s large and small political subdivision, with a report to be made to the municipalities and through the assessing standards board to the general court.”

III. These guidelines address the five assessment areas the Commissioner may consider, which are specifically identified in RSA 21-J:11-a, regarding whether the:

A. Level of assessments and uniformity of assessments are within acceptable ranges as recommended by the Assessing Standards Board by considering, where appropriate, an assessment-to-sales-ratio study conducted by the department for the municipality.

1. A median ratio should be between 0.90 and 1.10 with a 90% confidence level in the year of the review.

2. An overall coefficient of dispersion (COD) for the municipality’s median ratio should not be greater than 20.0 without the use of a confidence interval.

B. Assessment practices substantially comply with applicable statutes and rules.

1. All records of the municipality’s assessor’s office should be available to the public pursuant to RSA 91-A.

2. Ninety-five percent of the property records in the sample reviewed by the DRA should reflect assessments of properties as of April 1, pursuant to RSA 74:1; and that a municipality should not assess parcels or new construction that did not exist as of April 1 of that tax year.

3. A municipality should have a revised inventory program in place that addresses compliance with RSA 75:8, which provides that annually, and in accordance with
state assessing guidelines, assessors and selectmen shall adjust assessments to reflect changes so that all assessments are reasonably proportional within the municipality.

4. In accordance with RSA 31:95-a, a municipality’s tax maps should:
   a. Show the location of each property drawn to scale;
   b. Be updated annually; and
   c. Include an index of each parcel by the property owner’s name and parcel identifier.

5. Eighty-five percent of the current use property records in the sample reviewed by the DRA should have:
   a. A timely filed Form A-10, Application for Current Use Assessment; (RSA 79-A:5 and Cub 302)
   b. If applicable, a timely filed Form CU-12, Summary of Forest Stewardship Plan for Current Use Assessment; (RSA 79-A:5 and Cub 304.03)
   c. Current use valuations assessed in accordance with Cub 304; and
   d. A procedure to determine, prior to July 1 of each year, if previously classified land has undergone a change in use for purposes of assessing the Land Use Change Tax. (RSA 79-A:7)

6. In accordance with RSA 21-J:11, all appraisal service contracts or agreements in effect during the assessment review year for tax assessment purposes should:
   a. Be submitted to the DRA, prior to work commencing, as notification that appraisal work shall be done in the municipality; and
   b. Include the names of all personnel to be employed under the contract.

C. Exemption and credit procedures substantially comply with applicable statutes and rules;

1. A periodic review should be done by the municipality of all exemptions and credits at least once every assessment review cycle. Municipalities scheduled for assessment review in 2004 should perform the review of all exemptions and credits by December 31, 2004.

2. The municipality should have on file a current Form BTLA A-9, List of Real Estate and Personal Property on Which Exemption is Claimed, as described in Tax 401.04(b) for all religious, educational and charitable exemptions.

3. The municipality should have on file a current form BTLA A-12, Charitable Organization Financial Statement, as described in Tax 401.01(c), for all charitable
exemptions.

D. Assessments are based on reasonably accurate data; and

1. The municipality should have no material errors on at least eighty percent of the property record cards reviewed by the DRA. A material error is defined to be any error or combination of errors that results in a variance greater than 5% of the total assessed value of the property; and includes, but is not limited to:

   a. Mathematical miscalculations;
   b. Inconsistent land values without notation or documentation;
   c. Inconsistent depreciation without notation or documentation;
   d. Inconsistent neighborhood adjustments without notation or documentation;
   e. Market adjustments without notation or documentation;
   f. Acreage noted that does not match the tax map unless otherwise noted;
   g. Omission of data such as, but not limited to;
      i. Addition of improvements;
      ii. Removal of improvements;
      iii. Conversion of improvements;
   h. Erroneous measurements resulting in a square foot variance of 10% or more of the primary improvement(s).

2. The level of accuracy of the data elements should be determined by the DRA by comparing the information regularly collected by the municipality on a sample of property record cards with the actual property. Prior to commencement of the review process, the DRA should meet with the municipality’s assessing officials to obtain an understanding of the municipality’s data collection techniques used to determine value and the data elements regularly collected by the municipality that are included on the municipality’s property record cards.

E. Assessments of various types of properties are reasonably proportional to other types of properties within the municipality.

1. The municipality’s median ratios with a 90% confidence level for the following 3 strata should be within 5% of the overall median ratio (point estimate):

   a. Improved residential up to and including 4-family units;
b. Improved non-residential; and

c. Unimproved property.

2. No ratio should be calculated for a particular stratum unless minimums of 8 sales are available in that stratum. If no ratio has been calculated, the sales should not be collapsed into another strata.

3. The DRA should calculate the municipality’s price related differential (PRD) with a 90% confidence level and report the PRD to the municipality and the ASB.

IV. Property sales utilized in the DRA’s annual assessment ratio study conducted for equalization purposes should be used to calculate the median ratios, CODs, and PRDs under guidelines (A) and (E) above. The ratio percentages should be rounded to 3 places. The sample size of the ratio study should contain at least 2% of the total taxable parcels in a municipality; and have a total of at least 8 sales. Alterations to property sales may be based upon documentation submitted by the municipality such as, but not limited to:

A. Sales involving an exchange of property for boundary line adjustments; and

B. Sales of personal property included in the sale; and

C. Sales of properties located in more than one municipality.

V. In accordance with RSA 21-J:14-b, II, these guidelines will be reviewed and updated annually. Minutes of the ASB along with meeting and forum schedules may be found at the Department of Revenue Administration website.
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APPENDIX C - GLOSSARY


Assessment Review Year - The property tax year set by the department for which a municipality’s assessment review shall occur.

BTLA – Board of Tax and Land Appeals

Coefficient of Dispersion (COD) - A measure of assessment equity that represents the average absolute deviation of a group of ratios from the median ratio expressed as a percentage of the median.

Confidence Interval - The range established by electronic means within which one can conclude a measure of population lies.

Confidence Level - The required degree of confidence in a statistical test or confidence interval.

DRA - The New Hampshire Department of Revenue Administration.


Level of Assessment - The overall ratio of appraised values of properties to market value of properties.

Mean Ratio - The result reached after the sum of all ratios is divided by the total number of ratios.

Median Ratio - The middle ratio when a set of all ratios is arranged in order of magnitude.

Point Estimate (of the Median Ratio) - A single number that represents the midpoint, or middle ratio, when the ratios are arrayed in order of magnitude.

Price Related Differential (PRD) - A measure of the differences in the appraisal of low value and high value properties in assessments, as calculated by dividing the mean ratio by the weighted mean ratio.

Ratio Study - The study of the relationship between appraised or assessed property values and the current market value of the properties.

Strata - A division of properties into subsets for analysis.

Uniformity of Assessments - The degree to which assessments bear a consistent relationship to market value.

Weighted Mean Ratio - The result reached when the sum of all appraised values is divided by the sum of all sale prices.
### APPENDIX D – EQ SUMMARY

**New Hampshire Department of Revenue Administration**

**2004 Assessment Review Summary**

**MANCHESTER**

(FINAL DRA version)

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Low Median Ratio</th>
<th>90%CI Median Ratio</th>
<th>High Median Ratio</th>
<th>Low PRD PRD</th>
<th>High PRD PRD</th>
<th>Coefficient of Dispersion</th>
<th># Untrimmed Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANY</td>
<td>FULL REPORT (NO STRATIFICATION)</td>
<td>56.0 56.4</td>
<td>56.8 .99</td>
<td>1.00 1.01</td>
<td>15.5</td>
<td>2053</td>
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<td></td>
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<tr>
<td>GA1</td>
<td>AREV IMPROVED RES</td>
<td>56.4 56.8</td>
<td>57.3 1.00</td>
<td>1.01 1.01</td>
<td>14.3</td>
<td>1835</td>
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<td>GA2</td>
<td>AREV IMPROVED NON-RES</td>
<td>50.3 51.9</td>
<td>53.9 .90</td>
<td>1.00 1.00</td>
<td>21.8</td>
<td>180</td>
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<tr>
<td>GA3</td>
<td>AREV UNIMPROVED</td>
<td>31.6 34.8</td>
<td>38.3 1.08</td>
<td>1.19 1.40</td>
<td>58.5</td>
<td>39</td>
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<tr>
<td>GA4</td>
<td>AREV MISCELLANEOUS</td>
<td>NA NA</td>
<td>NA NA</td>
<td>NA NA</td>
<td>NA NA</td>
<td>NA</td>
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#### MEDIAN TESTS FOR OVERALL & STRATA

**OVERALL MEDIAN POINT ESTIMATE (PE) CONFIDENCE INTERVAL (CI) should overlap the range of (90 to 110)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Criteria Low-High Range</th>
<th>L</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>ANY</td>
<td>FULL REPORT (NO STRATIFICATION)</td>
<td>M</td>
<td>NO</td>
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</tbody>
</table>

**AREV IMPROVED RES MEDIAN CI should overlap the OVERALL MEDIAN PE +/-5% range of (53.6 to 59.2)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Criteria Low-High Range</th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA1</td>
<td>AREV IMPROVED RES</td>
<td>M</td>
<td>YES</td>
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</tbody>
</table>

**AREV IMPROVED NON-RES MEDIAN CI should overlap the OVERALL MEDIAN PE +/-5% range of (53.6 to 59.2)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Criteria Low-High Range</th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA2</td>
<td>AREV IMPROVED NON-RES</td>
<td>M</td>
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</tbody>
</table>

**AREV UNIMPROVED MEDIAN CI should overlap the OVERALL MEDIAN PE +/-5% range of (53.6 to 59.2)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Criteria Low-High Range</th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA3</td>
<td>AREV UNIMPROVED</td>
<td>M</td>
<td>NO</td>
</tr>
</tbody>
</table>

The Full Report (overall) COD should be 20.0 or below. **IS IT?**

Yes

HAVE ALL CRITERIA ABOVE THIS LINE BEEN MET? **IS IT?**

No

### PRD TEST FOR OVERALL

**OVERALL PRD CI should overlap the range of (.98 to 1.03)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Criteria Low-High Range</th>
<th>L</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>ANY</td>
<td>FULL REPORT (NO STRATIFICATION)</td>
<td>M*</td>
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**BATCH NUMBER S149-050318-120320**

**JOBTYPE - MULTI-REPORT**

**REPORT NUMBER "AREVS"**

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