

Real Estate Owned (REO) Stabilization Opportunity Score A Brief Explanation (Updated using March 2009 Data)

What is the intended use of the REO Stabilization Opportunity Score (SOS) Index?

After properties are foreclosed and being auctioned off unsuccessfully, they will become Real Estate Owned (REO) properties when lenders take over their ownership. The REO SOS Index is designed to help local agencies, organizations, and other entities identify opportunities for rehabilitating, acquiring, and/or redeveloping REO properties in order to stabilize communities impacted by foreclosures and REOs.

Although the Index was produced to help participating agencies of the Neighborhood Stabilization Program, any entity interested in REO stabilization work can use it.

How is the score calculated?

The Index evaluates two main areas (current and future availability of REOs and local REO/real estate market health) using four criteria:

- 1) *REO availability*: This criterion evaluates the number of REOs in each ZIP as of March 2009, weighted by the concentration of these REOs. Previous studies consistently suggest that when foreclosures and REOs are spatially clustered, the negative spillover effects are more intense. The concentration weight reflects that fact. The number of REOs is based on the LPS (Lender Processing Services Inc.) Applied Analytics (formerly McDash) dataset, which covers the majority of active mortgages. Nonetheless, because of the dataset does not cover the entire pool of active mortgages, the actual number of REOs within each ZIP may be slightly higher than the estimates indicated in the attached table. Please refer to Footnote 3 in the table for more detailed coverage information for a specific state.
- 2) *90-day and more delinquency*: This criterion serves as a proxy for possible future REOs. Similar to the “REO availability” criterion, this criterion evaluates the number of 90-day and longer delinquencies, weighted by their spatial concentrations. The estimates are subject to the same coverage limitations discussed in the “REO availability” section.
- 3) *Median time of an REO on the market*: This criterion evaluates the median length of time on the market for the properties that have become REO since 2005. The calculation includes not only the properties that have been repurchased since they became REO, but also those that are currently for sale. A longer median time on the market usually suggests a more stagnant local REO/real estate market.
- 4) *Median home sales price decline*: This criterion evaluates the absolute decline of the median home sales price, weighted by the percentage of such decline, between the period of January 2005 to June 2006 and the period of January 2008 to March 2009. ZIP codes with fewer than 15 transactions in either period are excluded since a small transaction volume could significantly skew the median sales price. Transactions with a price lower than \$10,000 are also excluded in the calculation as they are usually unconventional sales, such as transfers between family members. A negative value here suggests that the median home sale price has gone up. This criterion uses the data provided by the Warren Group.

Every ZIP code that has sufficient data for each of these four criteria is analyzed and compared against the rest of such ZIP codes within the state. A standardized score is then given in each of these four areas, 1.000 represents the higher level in the state (e.g. the longest median time of an REO on the market), while 0.000 represents the lowest level in the state. The final composite standardized score takes into consideration all four criteria.

What does the score mean?

The SOS Index is a standardized score, and it reflects the relative distressed level of a ZIP code with respect to the other ZIP codes in the state. A higher score indicates a higher distressed level. For instance, a ZIP code with a higher composite score may have a higher volume of REOs and 90-day+ delinquency. Compared with other ZIP codes in the state, it takes longer for REOs there to sell at a greater discount.

However, a higher score should not be interpreted simply as having higher stabilization potential: other factors may be in play.

On one hand, REO stabilization efforts in highly distressed areas may be more cost-effective than in a marginally distressed area. For instance, basic rehabilitation efforts on REOs in a highly distressed neighborhood could be a significant improvement, but it might not be that significant in a marginally distressed neighborhood where the few foreclosed properties are in relatively good condition. On the other hand, stabilization efforts in highly distressed neighborhoods could be less effective if the conditions are dire.

Therefore, the REO Index should serve only as a starting point, and policymakers should consider the specific local conditions when formulating REO strategies.

What is the difference between the REO SOS Index and the HUD and LISC indexes?

In addition to the obvious difference in each index's methodology, the REO SOS Index focuses exclusively on factors closely related to REOs. Nonetheless, the HUD Foreclosure Risk Score and the LISC Foreclosure Needs Score consider factors related to potential foreclosures, such as the prevalence of high-cost (or subprime) mortgages, vacancy rate, unemployment rate, etc. If an organization's program seeks to target areas with high foreclosure risks, then HUD and LISC indexes may be more appropriate. If an organization is interested in stabilizing the properties that have already become REOs, then the REO SOS Index is more appropriate.

Although foreclosure risk and REOs are somewhat related, they are not necessarily correlated. For instance, only a portion of the foreclosures will eventually end up in REOs. In addition, even after foreclosed properties have become REOs, some local areas, especially the relatively healthy ones, could leave such properties to market forces and not need additional (public) intervention efforts.

In addition, there are more-minor differences between the REO SOS Index and the HUD/LISC indexes. The REO SOS Index uses more recent data and is calculated at the ZIP code level. The HUD Index is calculated at the Census Tract Group level, although the LISC Index uses ZIP codes.

Where can I obtain further information on the REO SOS index?

A discussion paper with more in-depth discussion of the Index and related REO issues is underway. Please contact Kai-yan Lee (kai-yan.lee@bos.frb.org) for questions regarding the index.

Rhode Island REO Stabilization Opportunity Score
(Updated using March 2009 data)

| ZIP Code ⁽¹⁾ | Town ⁽²⁾ | REO Stability Opportunity Score | Number of REOs ⁽³⁾ | REOs per Square Mile | Index: REO Availability | Number of 90-day and more Delinquency ⁽³⁾ | 90-day and more Delinquency per Square Mile | Index: 90-day and more Delinquency | Median time of REO on Market (month) ⁽⁴⁾ | Index: Median Time of REO on Market | Median Home Sales Price Decline ⁽⁵⁾ | Percent of Median Home Sales Price Decline | Index: Home Sales Price Decline |
|-------------------------|---------------------|---------------------------------|-------------------------------|----------------------|-------------------------|--|---|------------------------------------|---|-------------------------------------|--|--|---------------------------------|
| 02804 | ASHAWAY | 0.075 | 1 | 0.08 | 0.094 | 6 | 0.49 | 0.151 | 6.40 | 0.472 | \$37,500 | 14.3% | 0.151 |
| 02806 | BARRINGTON | 0.340 | 1 | 0.12 | 0.132 | 15 | 1.78 | 0.491 | 6.85 | 0.585 | \$35,000 | 8.8% | 0.057 |
| 02809 | BRISTOL | 0.396 | 2 | 0.20 | 0.283 | 21 | 2.08 | 0.547 | 6.56 | 0.509 | \$54,000 | 15.5% | 0.302 |
| 02813 | CHARLESTOWN | 0.151 | 2 | 0.05 | 0.113 | 16 | 0.43 | 0.189 | 5.81 | 0.245 | \$65,000 | 17.8% | 0.472 |
| 02814 | CHEPACHET | 0.321 | 5 | 0.11 | 0.321 | 19 | 0.42 | 0.226 | 5.84 | 0.264 | \$55,100 | 20.0% | 0.415 |
| 02816 | COVENTRY | 0.679 | 15 | 0.40 | 0.585 | 74 | 1.98 | 0.660 | 6.90 | 0.717 | \$54,000 | 20.8% | 0.434 |
| 02817 | WEST GREENWICH | 0.226 | 5 | 0.10 | 0.302 | 18 | 0.36 | 0.170 | 5.60 | 0.226 | \$57,375 | 17.0% | 0.377 |
| 02818 | EAST GREENWICH | 0.302 | 4 | 0.18 | 0.358 | 15 | 0.66 | 0.302 | 5.32 | 0.170 | \$67,500 | 14.0% | 0.358 |
| 02822 | EXETER | 0.019 | 2 | 0.04 | 0.057 | 10 | 0.18 | 0.075 | 5.44 | 0.208 | \$50,100 | 13.9% | 0.208 |
| 02825 | FOSTER | 0.170 | 2 | 0.03 | 0.038 | 12 | 0.21 | 0.132 | 6.60 | 0.528 | \$53,000 | 16.7% | 0.340 |
| 02827 | GREENE | 0.170 | 1 | 0.05 | 0.000 | 1 | 0.05 | 0.000 | 6.29 | 0.377 | \$70,000 | 22.6% | 0.660 |
| 02828 | GREENVILLE | 0.132 | 1 | 0.20 | 0.170 | 6 | 1.20 | 0.208 | 5.87 | 0.283 | \$50,000 | 17.2% | 0.321 |
| 02837 | LITTLE COMPTON | 0.170 | 1 | 0.05 | 0.019 | 2 | 0.10 | 0.019 | 18.10 | 1.000 | \$2,000 | 0.5% | 0.000 |
| 02840 | NEWPORT | 0.528 | 14 | 1.76 | 0.698 | 25 | 3.15 | 0.604 | 6.87 | 0.604 | \$39,750 | 10.4% | 0.113 |
| 02842 | MIDDLETOWN | 0.038 | 2 | 0.15 | 0.226 | 13 | 1.00 | 0.358 | 2.13 | 0.000 | \$38,250 | 10.5% | 0.094 |
| 02852 | NORTH KINGSTOWN | 0.566 | 9 | 0.27 | 0.509 | 24 | 0.73 | 0.415 | 7.10 | 0.792 | \$64,000 | 18.9% | 0.509 |
| 02857 | NORTH SCITUATE | 0.094 | 6 | 0.14 | 0.396 | 10 | 0.23 | 0.113 | 6.10 | 0.358 | \$6,000 | 2.0% | 0.019 |
| 02859 | PASCOAG | 0.245 | 2 | 0.07 | 0.151 | 16 | 0.57 | 0.283 | 4.92 | 0.132 | \$65,272 | 22.1% | 0.566 |
| 02860 | PAWTUCKET | 0.906 | 42 | 7.75 | 0.906 | 124 | 22.88 | 0.943 | 7.29 | 0.811 | \$61,000 | 27.6% | 0.717 |
| 02861 | PAWTUCKET | 0.868 | 8 | 2.26 | 0.642 | 71 | 20.06 | 0.868 | 7.90 | 0.925 | \$60,500 | 25.7% | 0.623 |
| 02863 | CENTRAL FALLS | 0.943 | 34 | 28.10 | 0.943 | 49 | 40.50 | 0.906 | 7.58 | 0.849 | \$118,472 | 44.7% | 0.981 |
| 02864 | CUMBERLAND | 0.660 | 13 | 0.49 | 0.604 | 57 | 2.13 | 0.642 | 6.87 | 0.604 | \$65,000 | 21.3% | 0.528 |
| 02865 | LINCOLN | 0.472 | 9 | 0.52 | 0.566 | 36 | 2.08 | 0.585 | 4.32 | 0.075 | \$69,000 | 23.5% | 0.679 |
| 02871 | PORTSMOUTH | 0.585 | 7 | 0.30 | 0.491 | 17 | 0.74 | 0.340 | 6.84 | 0.547 | \$106,500 | 26.9% | 0.887 |
| 02874 | SAUNDERSTOWN | 0.000 | 1 | 0.07 | 0.075 | 5 | 0.36 | 0.094 | 2.35 | 0.019 | \$33,000 | 6.2% | 0.038 |
| 02878 | TIVERTON | 0.755 | 7 | 0.24 | 0.453 | 27 | 0.92 | 0.472 | 8.82 | 0.981 | \$75,000 | 25.0% | 0.811 |
| 02879 | WAKEFIELD | 0.377 | 3 | 0.08 | 0.189 | 18 | 0.48 | 0.245 | 6.42 | 0.491 | \$64,000 | 17.8% | 0.453 |
| 02882 | NARRAGANSETT | 0.057 | 2 | 0.15 | 0.208 | 12 | 0.92 | 0.321 | 3.94 | 0.038 | \$57,000 | 13.6% | 0.245 |
| 02885 | WARREN | 0.358 | 2 | 0.33 | 0.340 | 13 | 2.11 | 0.509 | 5.87 | 0.283 | \$47,500 | 16.3% | 0.226 |
| 02886 | WARWICK | 0.642 | 18 | 1.21 | 0.679 | 75 | 5.06 | 0.717 | 7.08 | 0.755 | \$40,000 | 16.3% | 0.189 |
| 02888 | WARWICK | 0.604 | 14 | 2.30 | 0.736 | 53 | 8.69 | 0.736 | 5.89 | 0.321 | \$52,500 | 22.7% | 0.491 |
| 02889 | WARWICK | 0.830 | 36 | 4.10 | 0.849 | 96 | 10.95 | 0.830 | 6.87 | 0.604 | \$62,310 | 27.1% | 0.736 |
| 02891 | WESTERLY | 0.264 | 7 | 0.26 | 0.472 | 22 | 0.82 | 0.434 | 5.32 | 0.170 | \$30,000 | 10.5% | 0.075 |
| 02892 | WEST KINGSTON | 0.453 | 3 | 0.10 | 0.245 | 7 | 0.24 | 0.057 | 6.84 | 0.547 | \$105,424 | 29.0% | 0.906 |
| 02893 | WEST WARWICK | 0.774 | 30 | 3.93 | 0.811 | 69 | 9.03 | 0.774 | 6.90 | 0.717 | \$57,000 | 24.4% | 0.547 |
| 02895 | WOONSOCKET | 0.887 | 40 | 5.19 | 0.887 | 81 | 10.51 | 0.811 | 6.87 | 0.604 | \$68,000 | 31.2% | 0.849 |
| 02896 | NORTH SMITHFIELD | 0.113 | 5 | 0.22 | 0.434 | 14 | 0.63 | 0.264 | 3.94 | 0.038 | \$44,220 | 14.0% | 0.170 |
| 02898 | WYOMING | 0.491 | 2 | 0.19 | 0.264 | 2 | 0.19 | 0.038 | 7.08 | 0.755 | \$85,000 | 27.4% | 0.868 |
| 02903 | PROVIDENCE | 0.547 | 2 | 1.25 | 0.528 | 8 | 5.00 | 0.528 | 7.37 | 0.830 | \$46,000 | 17.6% | 0.283 |
| 02904 | PROVIDENCE | 0.811 | 33 | 6.23 | 0.868 | 83 | 15.66 | 0.849 | 6.87 | 0.604 | \$57,500 | 25.3% | 0.585 |
| 02905 | PROVIDENCE | 0.925 | 51 | 13.18 | 0.925 | 97 | 25.06 | 0.925 | 7.84 | 0.868 | \$103,000 | 42.4% | 0.943 |
| 02906 | PROVIDENCE | 0.717 | 11 | 3.33 | 0.755 | 20 | 6.06 | 0.623 | 8.08 | 0.943 | \$55,250 | 14.4% | 0.264 |
| 02907 | PROVIDENCE | 0.962 | 54 | 23.89 | 0.962 | 115 | 50.88 | 0.962 | 7.84 | 0.868 | \$123,304 | 51.4% | 1.000 |

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|--|---------------------|---------------------------------|-------------------------------|----------------------|-------------------------|--|---|------------------------------------|---|-------------------------------------|--|--|---------------------------------|
| 02908 | PROVIDENCE | 0.962 | 85 | 25.84 | 0.981 | 147 | 44.68 | 0.981 | 7.87 | 0.906 | \$102,000 | 42.1% | 0.925 |
| 02909 | PROVIDENCE | 1.000 | 102 | 29.91 | 1.000 | 172 | 50.44 | 1.000 | 8.29 | 0.962 | \$111,575 | 46.5% | 0.962 |
| 02910 | CRANSTON | 0.774 | 23 | 6.35 | 0.830 | 79 | 21.82 | 0.887 | 6.29 | 0.377 | \$65,000 | 27.1% | 0.755 |
| 02911 | NORTH PROVIDENCE | 0.698 | 16 | 6.78 | 0.792 | 35 | 14.83 | 0.755 | 6.29 | 0.377 | \$62,800 | 25.1% | 0.642 |
| 02914 | EAST PROVIDENCE | 0.623 | 10 | 1.85 | 0.660 | 34 | 6.27 | 0.679 | 6.29 | 0.377 | \$60,250 | 24.6% | 0.604 |
| 02915 | RIVERSIDE | 0.491 | 6 | 1.16 | 0.623 | 18 | 3.47 | 0.566 | 5.90 | 0.340 | \$50,000 | 20.0% | 0.396 |
| 02916 | RUMFORD | 0.283 | 3 | 1.15 | 0.547 | 6 | 2.31 | 0.377 | 4.63 | 0.113 | \$37,000 | 13.5% | 0.132 |
| 02917 | SMITHFIELD | 0.415 | 4 | 0.19 | 0.377 | 20 | 0.95 | 0.453 | 5.13 | 0.151 | \$68,750 | 24.3% | 0.698 |
| 02919 | JOHNSTON | 0.736 | 27 | 1.14 | 0.717 | 87 | 3.67 | 0.698 | 6.29 | 0.377 | \$71,900 | 28.2% | 0.830 |
| 02920 | CRANSTON | 0.849 | 30 | 3.26 | 0.774 | 88 | 9.55 | 0.792 | 6.89 | 0.698 | \$68,500 | 26.3% | 0.774 |
| 02921 | CRANSTON | 0.434 | 4 | 0.28 | 0.415 | 15 | 1.05 | 0.396 | 4.32 | 0.075 | \$84,500 | 21.4% | 0.792 |
| ZIP Codes with Insufficient Data and Were Excluded in the Score Calculation | | | | | | | | | | | | | |
| 02815 | CLAYVILLE | | 2 | 0.80 | | 2 | 0.80 | | 3.37 | | | | |
| 02831 | HOPE | | 3 | 0.37 | | 7 | 0.87 | | 3.35 | | | | |
| 02838 | MANVILLE | | 1 | 1.14 | | 1 | 1.14 | | 5.87 | | | | |
| 02858 | OAKLAND | | 1 | 1.14 | | 2 | 2.27 | | 10.53 | | | | |
| 02872 | PRUDENCE ISLAND | | 1 | | | 1 | | | 10.26 | | | | |
| 02902 | PROVIDENCE | | 1 | | | 1 | | | 5.32 | | | | |

Notes:

- (1) Only includes ZIPs codes with sufficient data in the calculation of the scores.
- (2) Town names are based on USPS standard town names assigned to the ZIP codes. Some, though not many, ZIP codes may cross town limits and therefore cover multiple towns.
- (3) Reflect status as of March 2009. The dataset from LPS Applied Analytics covers approximately 75% of the mortgages in RI. Therefore, it is possible that the actual numbers of REOs and delinquencies are slightly higher than these estimates, which are based on the dataset from LPS Applied Analytics.
- (4) The calculation includes properties became REO since 2005, covering properties currently still on the market and the ones already have been purchased.
- (5) Median home sales price decline calculated based on transaction records from the Warren Group. It is the difference between the median home sales price for the period of Jan 2005-June 2006 and the period of Jan. 2009 - Jan. 2009. ZIP codes with fewer than 15 transactions in either period are eliminated from the calculation as a small transaction volume could severely skew the median sales price.