



TMRS Annual City Conference

# **How the Actuarial and Investments Policies Fuel the Benefit**

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## **TMRS' Mission Statement:**

**Providing secure, reliable  
retirement benefits**

# Basic Retirement Plan Funding Formula

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$$C + I = B + E$$

Contributions + Investment Earnings = Benefits + Expenses

OR

Benefits = Contributions + Investment Earnings - Expenses

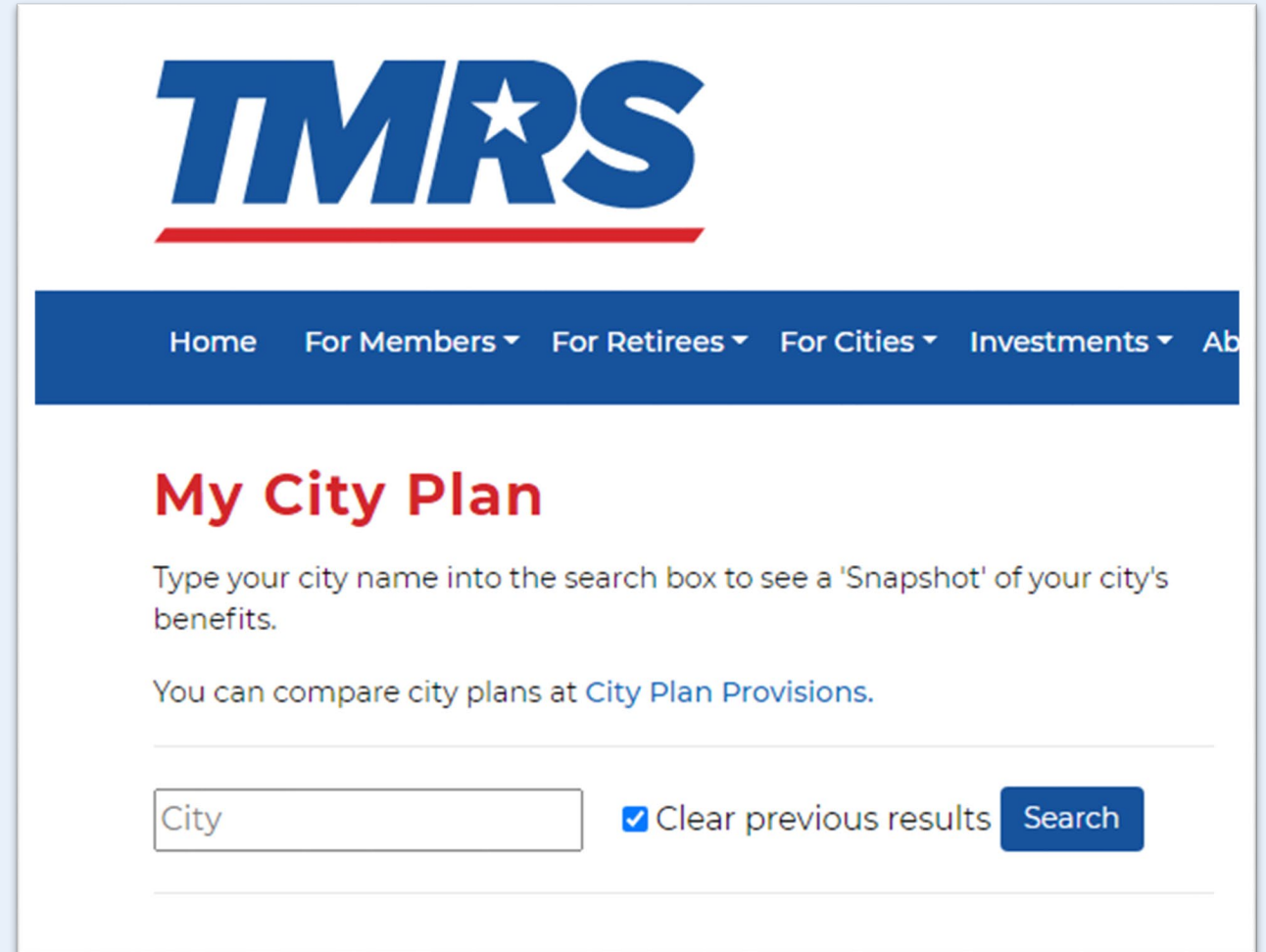
# Benefits + Expenses

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- Expenses are the cost to administer TMRS
- Benefits are what the city controls:
  - Member Deposit Rate
  - City Matching Ratio
  - USC and COLA
  - Vesting
  - Retirement Eligibility
  - Supplemental Death Benefit

# Benefit Plan Design

- Individualized options
- Certain benefits can be changed prospectively to help control the city's cost



The screenshot displays the TMRS website interface. At the top is the TMRS logo in blue with a white star. Below the logo is a dark blue navigation bar with white text for 'Home', 'For Members', 'For Retirees', 'For Cities', 'Investments', and 'Ab'. The main content area features the heading 'My City Plan' in red. Below this heading is a search box with the placeholder text 'City'. To the right of the search box is a checked checkbox labeled 'Clear previous results' and a blue 'Search' button. The text 'Type your city name into the search box to see a 'Snapshot' of your city's benefits.' and 'You can compare city plans at [City Plan Provisions](#).' is positioned above the search box.

# **The Actuarial Side**

# Actuarial Funding: Contributions

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- Sustainability of benefits
- Strong funding policy
- Annual contributions are required to be made, by statute

# Actuarial Valuation Definitions

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- As of the study date, the valuation determines for each city:
  - Actuarial Accrued Liability (AAL) – the value of benefits already earned
  - Actuarial Value of Assets (AVA) – The assets accumulated to pay benefits
  - Unfunded Actuarial Accrued Liability (UAAL) – the difference between the AAL and the AVA
  - Funded Ratio – AVA as a percentage of the AAL



# Goal: Stable Contribution Rates

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## Retirement Rate = Normal Cost + Prior Service

- Normal Cost: cost of current year benefit accrual for active Members
- Prior Service: Rate necessary to amortize (pay off) the Unfunded Actuarial Accrued Liability over the remaining amortization period
- Both rates are expressed as a percentage of payroll

# What Affects Your City's Contribution Rate

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- Actual plan experience versus what was expected = gains and losses
  - Excess or shortfall of investment returns
  - Overall payroll growth
  - Average age and service characteristics of Members
  - Rate of turnover (refund)
  - Rate of retirement
  - Mortality rates
- Changes in benefit plan provisions
- Actuarial assumption changes

# Remember the Basic Formula...

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- Contributions, which we just discussed, plus Investment Earnings, are the two funding drivers
- There is a balance that must be developed between contributions and potential investment earnings
- TMRS' actuarial assumed rate of return is 6.75%

# **The Investment Side**

# Investment Earnings Play a Major Role

$$C + I = B + E$$

**Contributions + Investment Earnings = Benefits + Expenses**

## The long-term funding of your retirement benefit



Approximate proportions for illustrative purposes only

### ■ Member Deposits

A set percentage of your earnings each month (5, 6, or 7% of your salary).

### ■ City Contributions

A matching amount (1:1, 1.5:1, or 2:1) that the city contributes to your account at the time you retire.

### ■ Investment Earnings

TMRS assets are centrally, professionally invested. Investment earnings provide the majority of the total benefit.

# Investment Roles and Responsibilities

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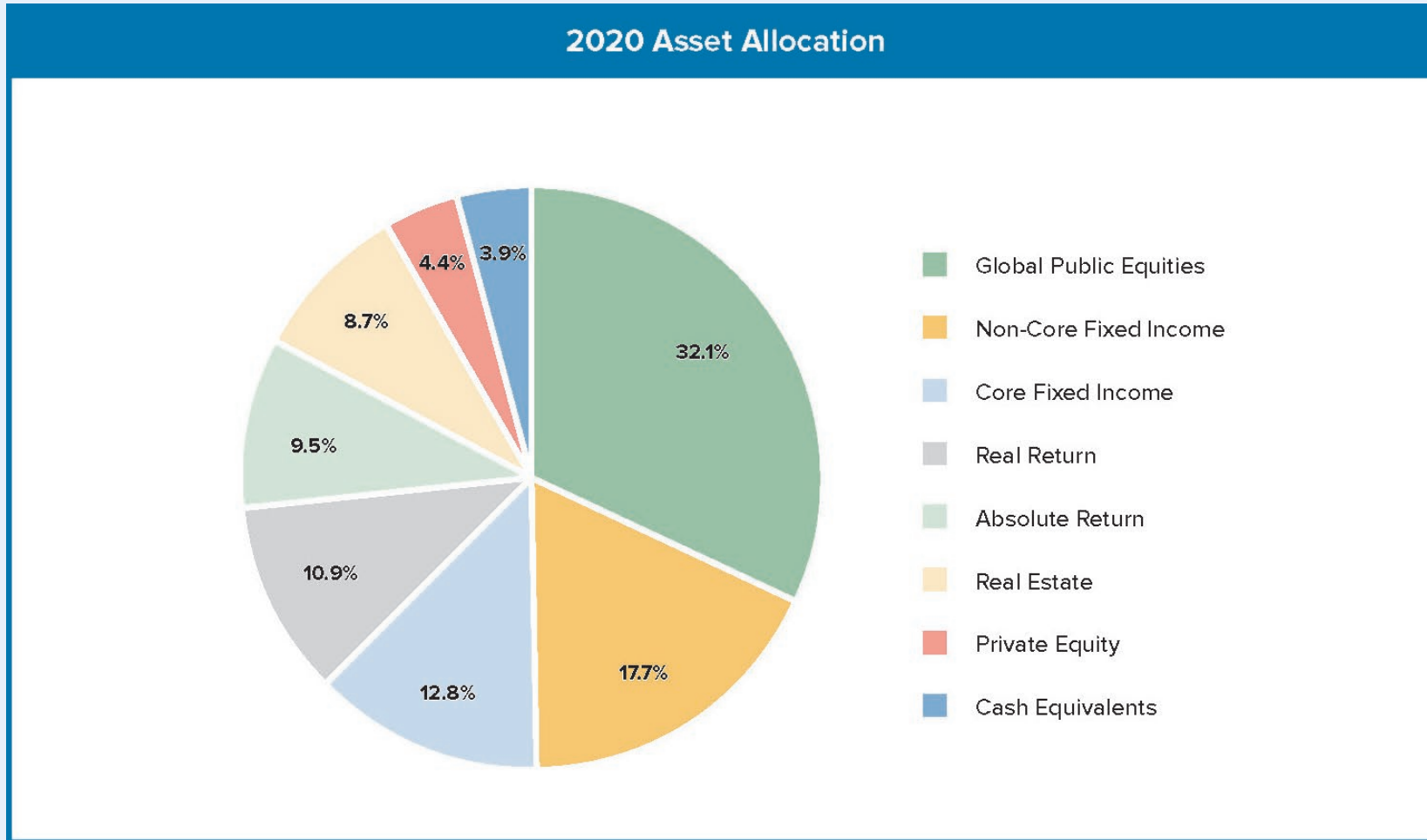
- **The Board of Trustees** is responsible for TMRS' investment program
  - Investment Policy Statement (IPS)
  - Asset Allocation and Risk Tolerance
  - Actuarial assumed rate of return (6.75%)

# Investment Policy Statement (IPS)

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- Goal of TMRS' Investments is to provided the benefits that have been promised.
- Investment return goals are to exceed both the plan benchmark and the actuarial return assumption, over 5-year time periods and longer.

# Asset Allocation and Returns

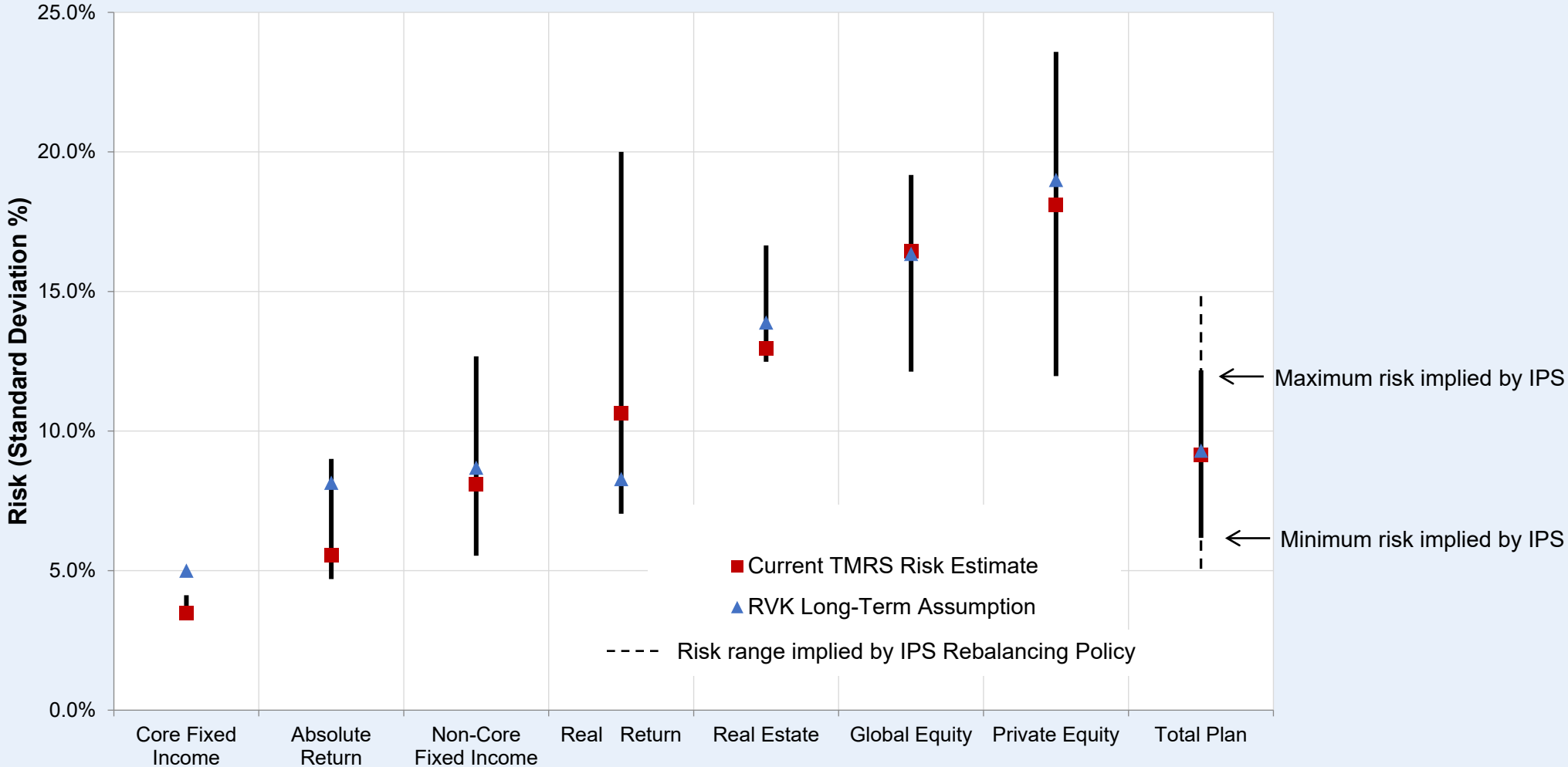


TMRS has met its Investment Return Assumption (6.75%) for the 5-year period and since inception (1989).



# Benefits of Diversification & Risk Management

12-31-2020 Risk Ranges



# Investment Guideline Compliance

## Quarter-End December 2020

| Policy Guidelines                    | Core Fixed Income | Non-Core Fixed Income | Real Return | Domestic Equity | Global Equity |
|--------------------------------------|-------------------|-----------------------|-------------|-----------------|---------------|
| Permitted/Prohibited Investments     | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Account Holdings/Position Limits     | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Credit Quality/Market Capitalization | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Concentration Risk                   | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Issue/Issuer                         | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Asset Class/Security Type/Sector     | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Currency/Country/Region              | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Liquidity/Cash Management            | ✓                 | ✓                     | ✓           | ✓               | ✓             |
| Interest Rate Risk                   | ✓                 | ✓                     | ✓           | N/A             | N/A           |
| Default Risk                         | ✓                 | ✓                     | ✓           | N/A             | N/A           |

# **A Powerful Combination**

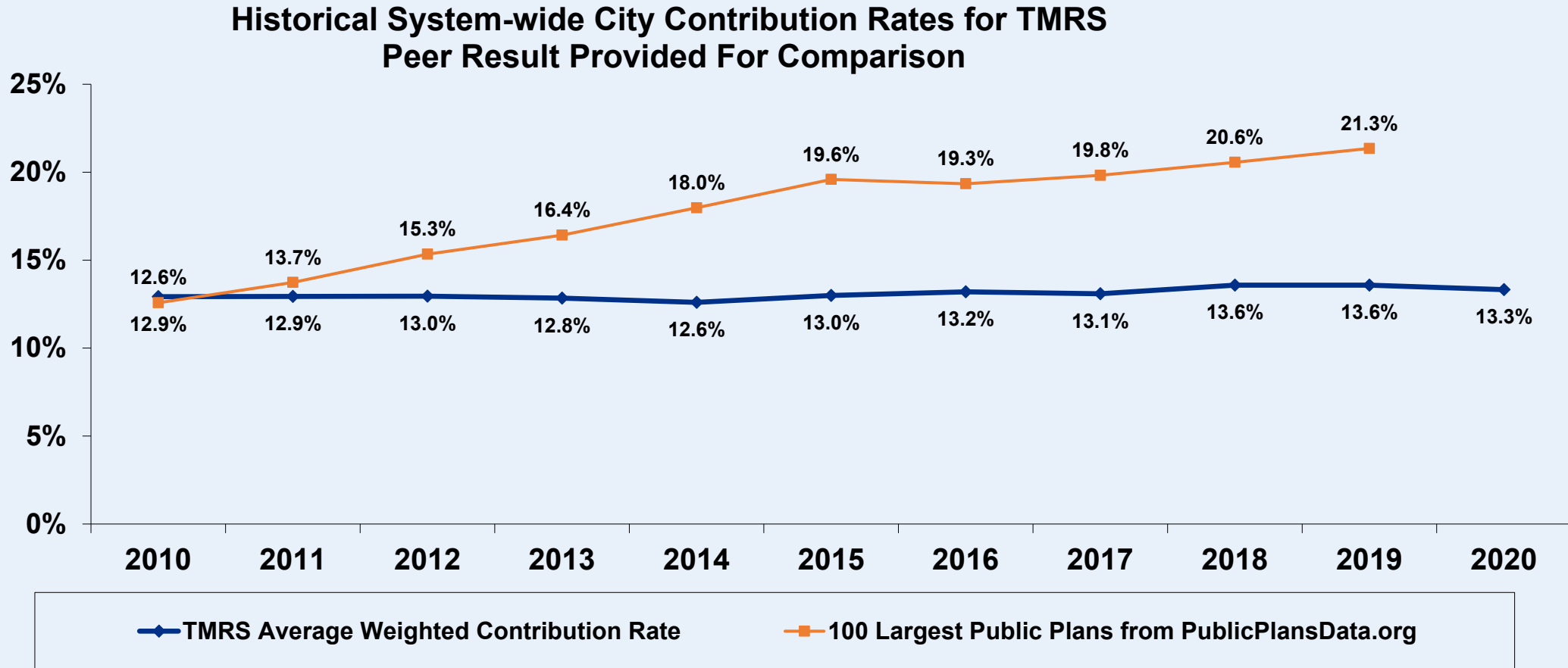
# Combining Actuarial with Investments

- Contribution rate levels have been stable from year-to-year.
- Funded ratios have increased steadily over time.
- TMRS has been able to meet its Investment Return Assumption over time.

**Most importantly – benefit levels are sustainable**

- The two graphs that follow demonstrate this sustainability over the last 10 years in relation to contribution rates and funded ratio.

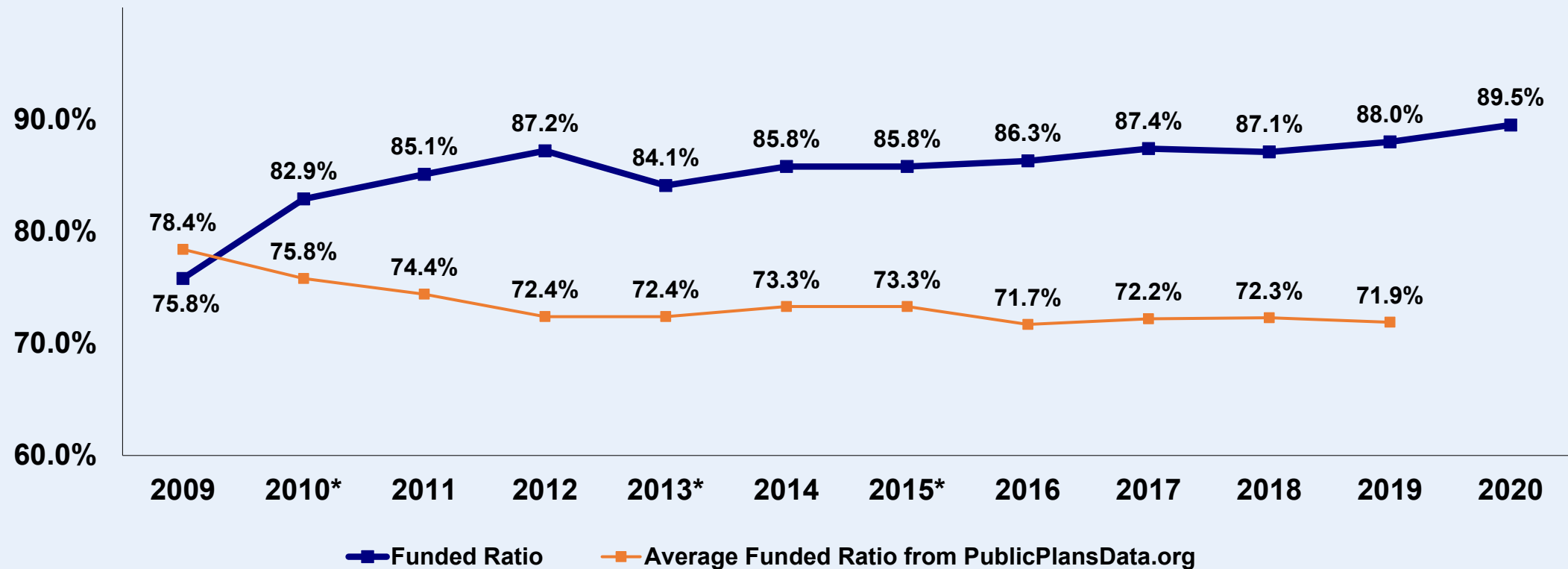
# Average City Contribution Rates Are Stable



Source: GRS

# System-wide Funded Ratio Continues to Improve

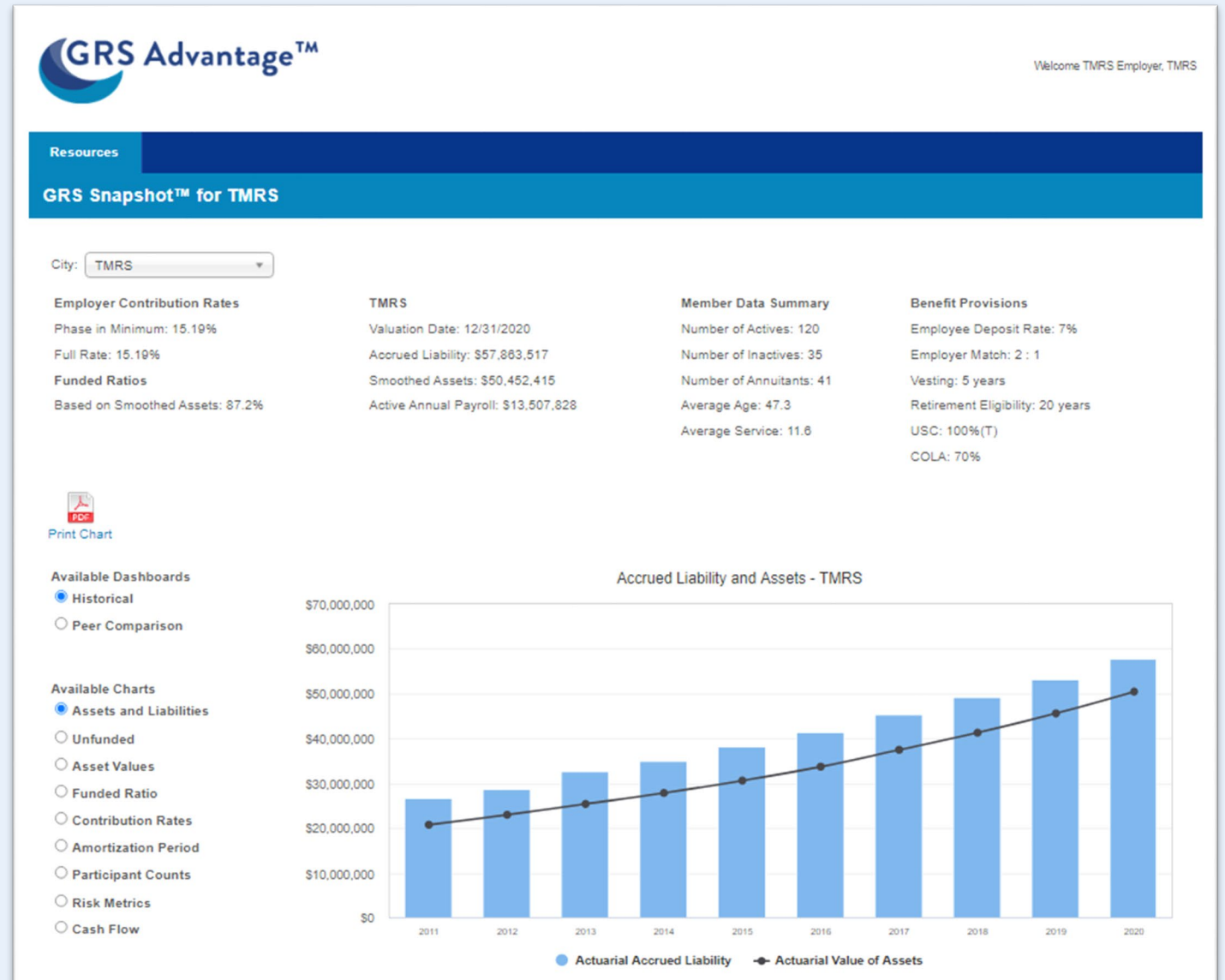
Historical System-wide Funded Ratio for TMRS  
Peer Result Provided For Comparison



\* Restructured in 2010, Change to EAN in 2013, 6.75% Discount Rate in 2015

# City Dashboard

[tmrs.com/  
city\\_dashboard.php](https://tmrs.com/city_dashboard.php)



**Questions, comments or concerns;  
email [cityservices@tmrs.com](mailto:cityservices@tmrs.com)**

