## INVESTMENT MANAGER SUMMARY

### MANAGEMENT

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>BlackRock Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager Tenure with Fund</td>
<td>15.5 Years</td>
</tr>
<tr>
<td>Investment Strategy/Vehicle</td>
<td>Large-Cap Core Equity</td>
</tr>
<tr>
<td>Contract Expiration</td>
<td>07/31/2019</td>
</tr>
</tbody>
</table>

### ASSETS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Firm AUM (01/31/2019)</td>
<td>$5.97 Trillion</td>
</tr>
<tr>
<td>Total Firm Assets in Strategy (01/31/2019)</td>
<td>$64.73 Billion</td>
</tr>
<tr>
<td>Total Assets Managed for WPERP (01/31/2019)</td>
<td>RP - $1.36 Billion</td>
</tr>
<tr>
<td></td>
<td>HP - $262.1 Million</td>
</tr>
</tbody>
</table>

### PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>3 Year</th>
<th>5 Year</th>
<th>Inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlackRock LCC (gross)</td>
<td>-2.13%</td>
<td>14.17%</td>
<td>10.71%</td>
<td>9.07%</td>
</tr>
<tr>
<td>BlackRock LCC (est. net)</td>
<td>-2.13%</td>
<td>14.17%</td>
<td>10.71%</td>
<td>9.01%</td>
</tr>
<tr>
<td>Russell 1000 Index</td>
<td>-2.17%</td>
<td>14.14%</td>
<td>10.68%</td>
<td>9.01%</td>
</tr>
<tr>
<td>Difference (net of fees)</td>
<td>0.04%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### Fees

<table>
<thead>
<tr>
<th>Schedule</th>
<th>1 basis point on the first $500 million</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.75 basis points on the balance</td>
</tr>
<tr>
<td>Current Blended Fee</td>
<td>0.84 basis points</td>
</tr>
</tbody>
</table>

### WATCH STATUS

N/A
Water and Power Employees’ Retirement Plan

Russell 1000 Index Fund Review

13 March 2019
Table of contents

I. BlackRock Update

II. Index Investment Process and Discipline

III. Market Overview

IV. Performance Review

V. Portfolio Characteristics

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I. BlackRock Update
BlackRock at a glance

BlackRock Mission Statement

Create a better financial future for our clients by building the most respected investment and risk manager in the world

BlackRock facts

- Established in 1988
- NYSE: BLK
- $5.97 trillion assets under management
- More than 13,500 employees
- More than 2,000 investment professionals
- Offices in over 34 countries
- 25 primary investment centers globally
- Clients in over 100 countries
- Over 850 iShares® ETFs Globally
- Through BlackRock Solutions, the Firm provides risk management and enterprise investment services for over 200 clients
- Financial Markets Advisory business managed or advised on over $8 trillion in asset and derivative portfolios
- Transition Management team partners with clients to save costs and reduce risks when changing investment exposures

$5.97 trillion managed across asset classes

Assets as of 31 December 2018

1 Includes commodity and currency mandates

As of 31 December 2018. All figures are represented in USD.
The LADWP Account Coverage Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeremy Watt</td>
<td>Director</td>
<td>(415) 670-7208</td>
<td><a href="mailto:jeremy.watt@blackrock.com">jeremy.watt@blackrock.com</a></td>
</tr>
<tr>
<td>Rick Castro</td>
<td>Vice President</td>
<td>(213) 613-3828</td>
<td><a href="mailto:rick.a.castro@blackrock.com">rick.a.castro@blackrock.com</a></td>
</tr>
</tbody>
</table>

San Francisco Office address: 400 Howard Street, San Francisco, CA 94105
II. Index Investment Process and Discipline
BlackRock’s Index proposition

Seeking to deliver high quality, cost effective access to a broad range of market opportunities

- Provide you with a broad range of market exposures together with a flexible range of product features
- An evolving range of products and solutions designed to help meet your needs today and in the future
- Partner with you to address your unique investment challenges through our customisation and solutions capabilities

- Disciplined investment approach focused on delivering optimal tracking, consistent returns and lowering the total cost of ownership
- Scale, breadth and diversity of our clients and strategies helps us to minimize transaction costs and seek to preserve the value of your investments
- Design products and solutions that consider the factors that impact your investment results from tax-efficiency to access and liquidity

- Our investment professionals are focused on delivering performance and efficient outcomes
- Extensive trading, risk and operational platform positioned to seek efficient tracking as well as enhanced returns
- Investment track record spanning four decades that has seen investors entrust us with $3.1 trillion of assets under management as of 31 December 2018
BlackRock’s Index Equity Platform

Global leader in Index Equity assets\(^1\)

- We seek to deliver consistent performance with efficient outcomes for our clients
- Thousands of skillful and thoughtful decisions made each year for swift response to market trends and client demands

Extensive and flexible platform for index strategies

- Over 2,000 funds managed against 850+ benchmarks
- Daily liquidity with T-1 notification (for US equities) and T-2 notification (for non US equities)\(^2\)
- Modular fund structure and asset allocation platform facilitates custom and outcome oriented solutions

Total index managed assets of $3.1 trillion USD

<table>
<thead>
<tr>
<th>In billions USD</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ETF</td>
<td>1,445</td>
<td>1,566</td>
<td>1,529</td>
<td>1,680</td>
<td>2,044</td>
<td>1,817</td>
</tr>
<tr>
<td>Global iShares</td>
<td>721</td>
<td>808</td>
<td>841</td>
<td>977</td>
<td>1,364</td>
<td>1,304</td>
</tr>
</tbody>
</table>

Distribution of assets by vehicle type in 2018 YTD

- ETF: 41.78%
- Separate Account: 32.42%
- CTF: 23.21%
- Other: 2.60%

Source: BlackRock, Inc. and its affiliates (together “BlackRock”) as of 31 December 2018

1. In terms of AUM. Source: Pensions & Investments
2. Currency hedged funds are currently open monthly
47 years of experience driving index forward

We constantly reinvest in and reinvent our business so our clients have access to high quality index solutions

- Drive the industry forward through our ability to create specialized, innovative investments afforded by our scale and depth of expertise
- Forge new ground for clients — first manager to offer opportunities in equity index developed and emerging markets
- Evolve capabilities to continuously deliver on emerging trends — smart beta, global benchmarking, liquidity/completion strategies
- Serve as an index advocate on behalf of clients and as a key partner to index providers seeking our practitioner knowledge

47 years of Index Equity — Continual evolution of products, technology and capabilities

BlackRock Index Equity AUM

<table>
<thead>
<tr>
<th>1971</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund of fund structures</td>
<td>Project Vision ESG fund series</td>
</tr>
<tr>
<td>EAFE Equity Index</td>
<td>Frontier Markets</td>
</tr>
<tr>
<td>Securities Lending</td>
<td>Minimum Volatility ETFs</td>
</tr>
<tr>
<td>Equity and currency hedging</td>
<td>Journey Management</td>
</tr>
<tr>
<td>First 401(k) Target Date Fund (LifePath)</td>
<td>Equity and currency hedging</td>
</tr>
<tr>
<td>Russell Index Funds</td>
<td>EM Directed FX</td>
</tr>
<tr>
<td>Investment Analysis: index portfolio management tool</td>
<td>Daily openings for all funds</td>
</tr>
<tr>
<td>Income strategy ETFs</td>
<td>Emerging Markets Small Cap</td>
</tr>
<tr>
<td>EAFE Small Cap</td>
<td>Factor ETFs</td>
</tr>
<tr>
<td>EM Directed FX</td>
<td>Aladdin Migration</td>
</tr>
<tr>
<td>Daily openings for all funds</td>
<td>T-2 for International</td>
</tr>
<tr>
<td>Emerging Markets Small Cap</td>
<td>Currency Hedged iShares ETFs</td>
</tr>
</tbody>
</table>
# Americas – Investments Pillar

## ETF and Index Investments Business

### Investments Pillar Leadership

**Manish Mehta**
Global Head of Investments, Products, and Markets

### Americas Portfolio Management

<table>
<thead>
<tr>
<th>Portfolio Management</th>
<th>Global Research</th>
<th>Global Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manish Mehta</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Americas Portfolio Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Portfolio Management

- **Developed Markets**
  - **Rachel Aguirre**, CFA
    - Head of Developed Markets Portfolio Management
  - **Jennifer Hsui**, CFA
    - Head of Emerging Markets Portfolio Management

- **Emerging**
  - **Amy Whitelaw**, CFA
    - Head of U.S. & Canada ETF Portfolio Management
  - **Greg Savage**, CFA
    - Head of Index Asset Allocation
  - **Creighton Jue**, CFA
    - Head of Index Plus Portfolio Management

- **U.S. & Canada ETF**
  - **Emily Foote**, CFA
    - Head of U.S. Product Strategy
  - **Scott Dohemann**, CFA
    - Head of EMEA Product Strategy
  - **Creighton Jue**
    - Head of Index Plus Portfolio Management

- **Defined Benefit & Defined Contribution**
  - **Christian De Leon**
    - Head of Index Research

- **Index Plus**
  - **Stephanie Allen**
    - Global Head of Index Research

- **Index Research**
  - **+ 30 Research Officers**

### Developed Markets

- **U.S. Inst’l**
  - **Rachel Aguirre**, CFA
    - Head of Developed Markets Portfolio Management
  - **Jennifer Hsui**, CFA
    - Head of Emerging Markets Portfolio Management
  - **6 Portfolio Managers**

- **International Emerging Inst’l**
  - **Amy Whitelaw**, CFA
    - Head of U.S. & Canada ETF Portfolio Management
  - **Greg Savage**, CFA
    - Head of Index Asset Allocation
  - **Creighton Jue**, CFA
    - Head of Index Plus Portfolio Management
  - **9 Portfolio Managers**

- **International Emerging ETF**
  - **Jane Hsui**, CFA
    - Head of Emerging Markets Portfolio Management
  - **6 Portfolio Managers**

- **Canada ETF**
  - **Emily Foote**, CFA
    - Head of U.S. Product Strategy
  - **Creighton Jue**
    - Head of Index Plus Portfolio Management
  - **6 Portfolio Managers**

- **FX / Synthetics**
  - **+ 4 Portfolio Managers**

### Emerging Markets

- **International ETF**
  - **Emily Foote**, CFA
    - Head of Emerging Markets Portfolio Management
  - **6 Portfolio Managers**

### Asia-Pacific

- **APAC**
  - **Jonathan Howie**
    - Head of APAC Index Strategy
  - **Marina Hinterhaeuser**
    - Head of APAC Index Strategy
  - **Priya Anoop**
    - Head of APAC Index Research
  - **Witsawon Tojaya**
    - Head of APAC Index Research

### Europe, Middle East, and Africa

- **EMEA**
  - **Andrew Graver**
    - Head of EMEA Index Strategy
  - **Rita Gemelou**
    - Head of EMEA Index Strategy
  - **Norbert van Wijlhuizen**
    - Head of EMEA Index Strategy
  - **Caroline Hertrich**
    - Head of EMEA Index Strategy
  - **Dovile Silenskyte**
    - Head of EMEA Index Strategy
  - **Enrico Zamagna**
    - Head of EMEA Index Strategy
  - **Emilie Karlsson**
    - Head of EMEA Index Strategy

### Americas

- **Ananth Madhavan**
  - Global Head of ETF and Index Research

### Global Strategy

- **Jessica Irschick**
  - Global Head of Index Product Strategy

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As of 31 December 2018

* Located outside of the US

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**FOR USE WITH INSTITUTIONAL INVESTORS ONLY – PROPRIETARY AND CONFIDENTIAL**
An extensive and flexible range of index capabilities

**Exposures**

- **Core Beta**
  - Local Market
  - Key Developed Countries & Regions
  - Developed Investment Grade
  - Global Developed Markets

- **Extended or Segmented Beta**
  - EM & Frontier
  - Small Caps
  - High Yield
  - Countries & Sectors
  - Duration & Styles
  - Currency Hedged
  - ESG
  - Property & ‘Alts’ Assets

- **Smart Beta**
  - Factor Strategies
  - Outcome Strategies
  - Reweighting Strategies

**Features**

- Tax Efficiency
- Liquidity
- Daily Access
- Intra-Day Access
- Fixed or Variable Spreads
- Operating Model
- Distributing & Accumulating Options
- Shares Class Currency Options
- Governance (e.g. UCITS, ERISA)
- Local Registration

**Vehicles**

- Separate Accounts
- 40 Act Funds
- LifePath Funds
- Unit Trusts/SICAV
- ETFs

*Matching the exposures you want with the features you need*
BlackRock Index Investments Philosophy and Process
An approach that seeks to deliver efficient investment outcomes

BlackRock’s disciplined, pragmatic and adaptable approach to index tracking is focused on optimally managing and balancing return, risk and cost.

Consistent Returns
- Seeks to deliver consistent and reliable returns in line with the benchmark
- Deep knowledge of financial markets and indices
- Track record of enhanced returns from securities lending

Risk Management
- Risk managed process that seeks to consistently deliver optimal tracking outcomes
- Market leading risk analytics and investment tools provided by our Aladdin® platform

Cost Efficiency
- Preserve value for clients through our intelligent approach to index events
- Extensive global trading platform helps ensure cost are low and we have optimal access to liquidity

Total Performance Management
Index investment management cycle – dedicated expertise and resources

**Performance & Oversight**
- Review cumulative effect of investment decisions to help identify factors contributing to/subtracting from portfolio performance
- Risk & Quantitative Analysis Team (RQA) monitors dozens of risk factors globally on a continuous basis

**Benchmark Knowledge**
- Detailed knowledge of index methodologies
- Experience with predicting and projecting index changes
- Focused on optimal treatment of corporate actions
- Continual research into index events

**Efficient Trading**
- Building smart trading strategies designed to access optimal liquidity
- Industry’s largest internal market place for potential netting of client flows
- Focused trading research and systems

**Portfolio Construction**
- Significant investment in technology
- Market leading portfolio and risk tools provided by our Aladdin® platform
- Integrated cost and liquidity analysis
- Knowledge of optimisation challenges
EII Strategies has a dedicated Index Research team

**Index equity benchmark management**
- The Index Research Group communicates directly with index vendors on various levels
  - Daily index loads to provide a clean fund snapshot
  - Project daily changes and rebalances
  - Field all equity index data requests across the firm

**Global coverage model**
- Based out of London and San Francisco, with daily reconciliations and handovers
  - 9 index analysts (5 US, 4 UK) and 1 global head

**Index methodology expertise**
- Use knowledge of benchmarks to assist with daily portfolio management, predictions, and consultations.
  - Benchmark expertise for index portfolio management
  - Seek to predict index changes before announcement
  - Lead consultations with index providers to drive methodology improvements
Index investment management cycle

Portfolio construction

Over 160+ Investment professionals dedicated to overseeing 2,000 Funds managed against 850+ benchmarks. Thousands of investment decisions made every year around:

- Optimizing versus full replication
- Equitizing cash
- Trading around periodic index changes
- Corporate action elections
- Investing / divesting based on client and participant instruction

BlackRock’s propriety portfolio management applications, Portfolio Construction and Index Pro, provide a seamless platform, where by every step of the investment process is handled electronically from the time a client order is placed to the time any required trades go out to market.

Screenshots are for illustrative purposes only. References to specific companies are included solely to help illustrate the portfolio construction process and should not be construed as a recommendation to buy or sell any securities. Actual BlackRock portfolios may or may not currently hold positions in the securities mentioned.

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Index investment management cycle

Efficient trading

Over 60 equity traders across four trading hubs and three spokes

- Leverage traders’ local market expertise
- Benefit from execution in appropriate time zone
- Common technology enables us to pass the book with embedded business continuity plan

BlackRock’s global coverage

Proprietary applications are used to monitor expected trading costs and actual trading costs

1. Ability to specify date range
2. Custom filters to drill into specific trading activity
3. Data visualization provides intuitive execution insights
4. Extensive library of metrics and analytics for evaluating trading performance
5. Enable breakdown of TCA across order, execution, broker, or asset-level characteristics and dimensions

24 hour a day, 5.5 day per week coverage

Data as of 31 December 2018
Screenshots are for illustrative purposes only.
Index investment management cycle

Performance & oversight

Performance and oversight of portfolios occurs through the following steps

- Daily Portfolio Management review
- Monthly IRC review with senior management
- Independent review from BlackRock’s Risk and Quantitative Analysis Group

The following additional systematic checks occur for all portfolios and accounts

**New account set-up**
- As part of the account set-up process, the OnBoarding group identifies client guidelines / restrictions
- Any guidelines / restrictions are then coded onto various PM and Trading systems

**Front-end compliance**
- On a real time basis prior to executions, the front-end compliance systems checks for restrictions and violations
- Violating trades would be blocked from proceeding

**Back-end compliance**
- Monitoring reports are generated daily as part of the “Green Package” reporting process
- Warnings and violations are distributed electronically to the relevant investment professions
Index events, trends, and themes
Overall the Global Index Equity Investment Team executed orders worth approximately $70 billion

- Overall performance of the reconstitution this year was positive
- Crossed approximately 50.36% of activity
- Turnover across passive managers was approximately $176 billion

Methodology Changes

- This year had very limited methodology changes
- The most relevant and interesting change pertains to the SPOT IPO
  - Under the new methodology, variable or best efforts IPOs will require a company press release or company filing confirming the actual number of shares sold on or prior to rank date.
  - Under the new methodology, Spotify did not qualify to be included at this Russell Reconstitution

Buy – sell spread performance

<table>
<thead>
<tr>
<th></th>
<th>Russell 1000</th>
<th>Russell 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adds</strong></td>
<td>Traded down 0.35%, underperforming the Russell 1000 by 0.53% due to weakness in Jazz Pharma (JAZZ) and Ceridian (CDAY).</td>
<td>Traded up 2.44%, outperforming the Russell 2000 by 2.64%. The highest contributors were Apollo medical (AMEH) and TrancEnterix (TRX).</td>
</tr>
<tr>
<td><strong>Deletes</strong></td>
<td>Delphi Technologies (DLPH) closed down 1.56%, underperforming the index by 1.74%.</td>
<td>Traded down 0.51%, underperforming the index by 0.31%. Biggest underperformers were Horizon Global (HZN) and Globalstar (GSAT).</td>
</tr>
<tr>
<td>Overall</td>
<td>Overall trade moved wrong-way.</td>
<td>Overall moved right way with Buys outperforming the Sells by 0.10%.</td>
</tr>
</tbody>
</table>

Index change highlights

<table>
<thead>
<tr>
<th></th>
<th>Russell 1000</th>
<th>Russell 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adds</strong></td>
<td>53</td>
<td>212</td>
</tr>
<tr>
<td><strong>Deletes</strong></td>
<td>38</td>
<td>152</td>
</tr>
<tr>
<td><strong>2018 Two-Way Turnover</strong></td>
<td>2.49%</td>
<td>14.49%</td>
</tr>
<tr>
<td><strong>2017 Two-Way Turnover</strong></td>
<td>3.90%</td>
<td>18.10%</td>
</tr>
</tbody>
</table>

Source: BlackRock, as of June 2018. Past performance is not indicative of future results. It is not possible to invest directly in an index. References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities.
November 2018 MSCI Quarterly Index Rebalance results

- EII executed 54,411 orders worth approximately $44 billion for the November MSCI Rebalance
- Overall, EII experienced slight underperformance on the rebalance trade
- 99% of trades were executed on effective date across all regions

Rebalance highlights

**Developed Markets**
- MSCI announced 23 additions, 19 deletions, 6 foreign inclusion factor (FIF) or float changes, and 830 additional changes to shares-in-issue trade
- The buys less sells spread closed down 0.02%

**Emerging Markets**
- MSCI announced 25 additions, 47 deletions, 18 foreign inclusion factor (FIF) or float changes, and 74 additional changes to shares-in-issue
- The buys less sells spread closed down 0.26%

**GICS Changes**
- The rebalance included the previously announced GICS restructuring whereby the Telecommunications sector was broadened and renamed Communication Services

MSCI index change details

<table>
<thead>
<tr>
<th>Index</th>
<th># Adds</th>
<th># Deletes</th>
<th>November 2018 Two-Way Turnover</th>
<th>November 2017 Two-Way Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAFE</td>
<td>11</td>
<td>10</td>
<td>0.80%</td>
<td>1.60%</td>
</tr>
<tr>
<td>EAFE SC</td>
<td>98</td>
<td>70</td>
<td>5.80%</td>
<td>8.20%</td>
</tr>
<tr>
<td>Emerging Standard</td>
<td>25</td>
<td>47</td>
<td>2.40%</td>
<td>2.60%</td>
</tr>
<tr>
<td>Emerging SC</td>
<td>94</td>
<td>235</td>
<td>14.14%</td>
<td>14.00%</td>
</tr>
<tr>
<td>World</td>
<td>23</td>
<td>19</td>
<td>1.20%</td>
<td>1.40%</td>
</tr>
<tr>
<td>Frontier 100</td>
<td>6</td>
<td>6</td>
<td>6.60%</td>
<td>6.20%</td>
</tr>
</tbody>
</table>

Source: BlackRock and MSCI as of November 2018. Past performance is not indicative of future results.
December 2018 S&P Dow Jones / FTSE Russell Index Rebalance results

The S&P Dow Jones/FTSE Rebalance resulted in a slight positive performance gain on the rebalance

- 99% of trades were executed on effective date across all regions with 55% crossed

- BlackRock traded 402 funds and executed 59K orders worth nearly $56 billion

Rebalance highlights

- Notional value of the rebalance trade was up 31% from last year
- Overall, net buys outperformed the net sells by 0.07%

Developed Markets:
- US: S&P 500 and 600 spreads were down 0.61% and 1.22% respectively, driven by underperformance of Celanese (500 add) and Smart Global (600 add). S&P 400 buys performed in-line with the sells resulting in a flat trade.
- APAC: The S&P/ASX was the only index that traded wrong way

Emerging Markets:
- The second tranche of the FTSE Kuwait inclusion was effective at this rebalance. In addition to the previously announced names, there were 2 new additions and 1 deletion. The rebalance trade went wrong way with the buys down -1.1% and the sell up 1.8%

<table>
<thead>
<tr>
<th>Index</th>
<th># Adds</th>
<th># Deletes</th>
<th>December 2018 One-Way Turnover</th>
<th>December 2017 One-Way Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>1</td>
<td>1</td>
<td>0.60%</td>
<td>0.30%</td>
</tr>
<tr>
<td>S&amp;P 400</td>
<td>0</td>
<td>0</td>
<td>0.36%</td>
<td>0.25%</td>
</tr>
<tr>
<td>S&amp;P 600</td>
<td>1</td>
<td>1</td>
<td>0.35%</td>
<td>0.22%</td>
</tr>
<tr>
<td>S&amp;P/TSX Completion</td>
<td>2</td>
<td>6</td>
<td>1.04%</td>
<td>2.19%</td>
</tr>
<tr>
<td>S&amp;P/DJ Total Stock Market Completion</td>
<td>46</td>
<td>8</td>
<td>0.63%</td>
<td>0.38%</td>
</tr>
<tr>
<td>FTSE All World</td>
<td>181</td>
<td>122</td>
<td>3.50%</td>
<td>3.16%</td>
</tr>
</tbody>
</table>

2018 FTSE & MSCI market classification summary

FTSE and MSCI announced a number of country reclassifications to their Developed and Emerging markets universes in 2018

**FTSE**

- **Poland** was promoted to Developed Market status in September 2017’s Country Classification, primarily driven by Poland’s equity market between 2004 – 2017. There will be a single tranche inclusion occurring in September 2018.

- **Saudi Arabia** has been on the Watch List since 2015 and made a number of improvements to the market infrastructure during 2017. The country will be implemented in several tranches due to their projected size of 2.7% in the FTSE Emerging Index beginning March 2019.

- **Kuwait** will be implemented as a Secondary Emerging Market status within the FTSE Global Equity Index Series in two 50% tranches. The first tranche will be implemented in September 2018 and the second in December 2018.

**MSCI**

- **Saudi Arabia** was officially added to the 2018 Annual Market Classification Review in 2017. The country will be implemented in a two-step inclusion process, commencing in May 2019 through to August 2019 and is projected to make up 2.6% of the MSCI Emerging Markets.

- **Argentina** will be included in the MSCI Emerging Markets Index coinciding with the May 2019 Semi-Annual Index Review, and make up 0.6% of the index. MSCI will continue to restrict the inclusion in the index to only foreign listings of Argentinian companies, such as ADRs, due to liquidity conditions.

Source: MSCI and FTSE as of 6/30/18
Index strategies continue to be a growing portion of client portfolios

Investors today are enhancing their passive allocations in three strategies:

<table>
<thead>
<tr>
<th>Return Enhancement Strategies</th>
<th>Index Plus</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhanced index strategy designed to actively seek alpha, by tactically employing event driven trading that focus on IPOs, index changes, and other corporate events that might cause price dislocation</td>
<td>Factor-based strategy designed to provide incremental returns over capitalization weighted indices through broad, persistent sources of return</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Securities Lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return enhancement strategy designed to capture scarcity premium by lending securities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Reduction Strategies</th>
<th>Minimum Volatility</th>
<th>Currency Hedged</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor-based strategy designed to reflect the characteristics of a minimum variance strategy focused on returns as well as the lowest absolute risk</td>
<td>Risk reduction strategy designed to minimize or eliminate foreign exchange risk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative Index Strategies</th>
<th>Commodities</th>
<th>Environmental, Social, and Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market cap weighted strategy designed to give exposure to commodities through the use of commodity futures</td>
<td>Market cap weighted strategy designed to incorporate ESG factors while minimizing tracking error to traditional indices</td>
</tr>
</tbody>
</table>
**Key takeaway**

**Our approach to Index: anything but passive**

Investors today demand more efficient returns and innovative ways to use index products.

BlackRock’s Index approach is focused on:

- **People**
  Team combines skill and ingenuity in seeking to enhance outcomes

- **Performance**
  Seek to provide consistent performance as planned

- **Process**
  Rooted in deep understanding of benchmarks and capital markets

- **Platform**
  Scale and technology innovations enhance ability to deliver consistent performance and minimize costs

- **Products**
  Flexible spectrum of solutions featuring more than 2,000 funds covering 850+ benchmarks
Performance attribution
Major sources of tracking error: Global & domestic index funds

- Minimize Impact
  - Tax Reclaim Process
  - Securities Lending
  - Treatment of Corporate Actions
  - Optimization
  - Treatment of Index Changes
  - Transaction Costs
  - Cash Drag
  - Illiquidity

- Maximize Impact
  - Enhances Return
# Summary of LADWP Investment Guidelines

<table>
<thead>
<tr>
<th>Index:</th>
<th>Russell 1000 Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fund Guidelines:</strong></td>
<td>The Russell 1000 Index Fund shall be invested and reinvested in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the segment of the United States market for publicly traded equity securities represented by the 1,000 largest capitalized companies. The criterion for the selection of investments shall be the Russell 1000 Index. When deemed appropriate by the Manager, the Manager may invest a portion of the Russell 1000® Index Fund in stock index futures contracts for the purpose of acting as a temporary substitute for investment in equity securities. The Russell 1000 Index Fund will not engage in speculative futures transactions. For the purposes of these investment guidelines the defined term &quot;Equity Securities&quot; shall mean common stocks and forms of equity securities (e.g., preferred stock), American Depository Receipts, European Depository Receipts, Global Depository Receipts and Investment Company Shares (as defined below) where such investment company portfolio seeks to replicate or outperform the performance of an equity index selected by the Manager.</td>
</tr>
<tr>
<td><strong>Tracking Error:</strong></td>
<td>+/- 10 basis points annually</td>
</tr>
</tbody>
</table>

The LADWP accounts are managed in strict compliance with the Plan's guidelines.
III. Market Overview
Market review for 2018

Global equities, as represented by the MSCI World Index, decreased -13.32% (in U.S. dollar terms) in the fourth quarter of 2018.

In APAC, Japan fell 14.3% in the fourth quarter. A roughly +3.5% jump in the yen against the dollar weighed on the export-oriented equity market broadly. Elsewhere, Australian equities fell 9.7%, as the slowdown in China weighed on the country’s domestic growth prospects.

The Western European region fell 12.8% in the quarter and contributed to 63% of the index’s quarterly decline. Slowing economic activity, broad-market risk-off behavior, and political uncertainty marred the region. The euro and sterling both moved lower against the dollar, down 4.8% and 5.9% on the year, respectively.

Within Europe, the United Kingdom fell 11% and contributed to a -1.6% drop in the index. Continued Brexit turbulence weighed on both consumer and investor sentiment. Elsewhere, French equities dropped 15% as the “Yellow Vest” political movement raised domestic uncertainty. German manufacturing orders declined throughout the quarter, catalyzing a -16% drop in Germany’s component of EAFE. The safe-haven 10yr German Bund yield ended the year at 0.23%, 34bps lower from intra-quarter highs.

In the U.S., concerns over Federal Reserve (Fed) policy, Sino-American trade tensions, and a potential slowdown in growth contributed to investor anxiety throughout the quarter. The quarter began with Fed chairman Powell’s comment that the U.S. Federal Funds rate was “a long way from neutral.” The hawkish comment drove a temporary sell-off in Treasuries. However, this was short lived, as declines in energy prices and softness in portions of the U.S. economy (the ISM Manufacturing Index fell from 59.8 in September to 54.1 in December) contributed to a reduction in inflation expectations. Coupled with broad based risk-off in December – which was the worst December performance on record since 1931 – and the 10yr UST yield ended the quarter 57bps lower than intra-quarter highs to 2.68%.

Despite the fact U.S. and China were able to broker a 90-day trade war “truce” on Dec. 1st, volatility abounded in December, in the wake of the FOMC announcement. Though the Fed’s December rate hike and lowering of interest rate projections was largely expected, the Fed’s relatively hawkish tone and Powell’s affirmation that the balance sheet run-off was to run on autopilot was punished by the market.
IV. Performance Review
LADWP Performance Overview

Our investment objective for the Los Angeles Department of Water and Power Fund is to replicate the risk and return of the Russell 1000 Index.

<table>
<thead>
<tr>
<th>Water and Power Retirement Plan:</th>
<th>$1,359,040,535</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement Health Benefits Fund:</td>
<td>$262,136,259</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Fund (gross)</th>
<th>Fund (net)</th>
<th>Index</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>8.38%</td>
<td>8.38%</td>
<td>8.38%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Year-to-date</td>
<td>8.38%</td>
<td>8.38%</td>
<td>8.38%</td>
<td>0.00%</td>
</tr>
<tr>
<td>1 year</td>
<td>10.98%</td>
<td>10.97%</td>
<td>10.95%</td>
<td>0.02%</td>
</tr>
<tr>
<td>3 years annualized</td>
<td>14.18%</td>
<td>14.17%</td>
<td>14.14%</td>
<td>0.03%</td>
</tr>
<tr>
<td>5 years annualized</td>
<td>10.72%</td>
<td>10.71%</td>
<td>10.68%</td>
<td>0.03%</td>
</tr>
<tr>
<td>10 years annualized</td>
<td>32.75%</td>
<td>32.73%</td>
<td>32.65%</td>
<td>0.08%</td>
</tr>
<tr>
<td>Since inception annualized</td>
<td>10.70%</td>
<td>10.69%</td>
<td>10.67%</td>
<td>0.02%</td>
</tr>
</tbody>
</table>

Source: BlackRock
As of 1/31/2019
Benchmark is the Russell 1000 Index
Inception Date: 08/07/2003. On 8/31/2010, LADWP redeemed out of the Large Cap Index Trust managed by BlackRock Investment Management, LLC and transitioned into the Russell 1000 Index Fund managed by BlackRock Institutional Trust, N.A.
LADWP Performance Overview

Our investment objective for the Los Angeles Department of Water and Power Fund is to replicate the risk and return of the Russell 1000 Index.

| Water and Power Retirement Plan: | $1,359,040,535 |
| Retirement Health Benefits Fund: | $262,136,259 |

<table>
<thead>
<tr>
<th>Year</th>
<th>Fund (gross)</th>
<th>Fund (net)</th>
<th>Index</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>15.62%</td>
<td>15.60%</td>
<td>15.46%</td>
<td>0.14%</td>
</tr>
<tr>
<td>2007</td>
<td>5.76%</td>
<td>5.74%</td>
<td>5.77%</td>
<td>-0.03%</td>
</tr>
<tr>
<td>2008</td>
<td>-37.63%</td>
<td>-37.65%</td>
<td>-37.60%</td>
<td>-0.05%</td>
</tr>
<tr>
<td>2009</td>
<td>28.48%</td>
<td>28.46%</td>
<td>28.43%</td>
<td>0.03%</td>
</tr>
<tr>
<td>2010</td>
<td>16.80%</td>
<td>16.78%</td>
<td>16.75%</td>
<td>0.03%</td>
</tr>
<tr>
<td>2011</td>
<td>1.56%</td>
<td>1.55%</td>
<td>1.50%</td>
<td>0.05%</td>
</tr>
<tr>
<td>2012</td>
<td>16.47%</td>
<td>16.46%</td>
<td>16.42%</td>
<td>0.04%</td>
</tr>
<tr>
<td>2013</td>
<td>33.14%</td>
<td>33.13%</td>
<td>33.11%</td>
<td>0.02%</td>
</tr>
<tr>
<td>2014</td>
<td>13.27%</td>
<td>13.26%</td>
<td>13.24%</td>
<td>0.02%</td>
</tr>
<tr>
<td>2015</td>
<td>0.96%</td>
<td>0.95%</td>
<td>0.92%</td>
<td>0.03%</td>
</tr>
<tr>
<td>2016</td>
<td>12.12%</td>
<td>12.11%</td>
<td>12.05%</td>
<td>0.06%</td>
</tr>
<tr>
<td>2017</td>
<td>21.71%</td>
<td>21.70%</td>
<td>21.69%</td>
<td>0.01%</td>
</tr>
<tr>
<td>2018</td>
<td>-4.75%</td>
<td>-4.76%</td>
<td>-4.78%</td>
<td>0.02%</td>
</tr>
</tbody>
</table>

Since inception annualized: 10.70% 10.69% 10.67% 0.02%

Source: BlackRock
As of 3/31/2019
Benchmark is the Russell 1000 Index
Inception Date: 08/07/2003. On 8/31/2010, LADWP redeemed out of the Large Cap Index Trust managed by BlackRock Investment Management, LLC and transitioned into the Russell 1000 Index Fund managed by BlackRock Institutional Trust, N.A.

FOR USE WITH INSTITUTIONAL INVESTORS ONLY – PROPRIETARY AND CONFIDENTIAL
LADWP Performance Overview

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Source: BlackRock
As of 1/31/2019
Benchmark is the Russell 1000 Index
Inception Date: 08/07/2003. On 8/31/2010, LADWP redeemed out of the Large Cap Index Trust managed by BlackRock Investment Management, LLC and transitioned into the Russell 1000 Index Fund managed by BlackRock Institutional Trust, N.A.
## LADWP Performance Overview

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<td>10.67%</td>
<td>0.02%</td>
</tr>
</tbody>
</table>

Source: BlackRock, As of 1/31/2019

Benchmark is the Russell 1000 Index

Inception Date: 08/07/2003. On 8/31/2010, LADWP redeemed out of the Large Cap Index Trust managed by BlackRock Investment Management, LLC and transitioned into the Russell 1000 Index Fund managed by BlackRock Institutional Trust, N.A.
LADWP Portfolio Attribution – Sectors

Our investment objective for the Los Angeles Department of Water and Power Fund is to replicate the risk and return of the Russell 1000 Index.

As this is a passive portfolio, portfolio attribution of sectors is not applicable.
Our investment objective for the Los Angeles Department of Water and Power Fund is to replicate the risk and return of the Russell 1000 Index.

As this is a passive portfolio, contributors/detractors are at index levels. There are no active over/underweights for attribution.
Our investment objective for the Los Angeles Department of Water and Power Fund is to replicate the risk and return of the Russell 1000 Index.

As this is a passive portfolio, stock selection is not performed. Individual securities are weighted at index levels, therefore attribution is not applicable.
V. Portfolio Characteristics
Russell 1000® Index Fund  
Characteristics  

As of 31 December 2018

<table>
<thead>
<tr>
<th>Fund information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benchmark</strong></td>
</tr>
<tr>
<td>Total fund assets</td>
</tr>
<tr>
<td>Number of issues in fund</td>
</tr>
<tr>
<td>Number of issues in benchmark</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top 10 holdings</th>
<th>Fund %</th>
<th>Index %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Corp</td>
<td>3.30</td>
<td>3.30</td>
</tr>
<tr>
<td>Apple Inc</td>
<td>3.21</td>
<td>3.21</td>
</tr>
<tr>
<td>Amazon Com Inc</td>
<td>2.61</td>
<td>2.61</td>
</tr>
<tr>
<td>Berkshire Hathaway Inc Class B</td>
<td>1.69</td>
<td>1.69</td>
</tr>
<tr>
<td>Johnson &amp; Johnson</td>
<td>1.48</td>
<td>1.48</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>1.38</td>
<td>1.38</td>
</tr>
<tr>
<td>Alphabet Inc Class C</td>
<td>1.35</td>
<td>1.35</td>
</tr>
<tr>
<td>Alphabet Inc Class A</td>
<td>1.34</td>
<td>1.34</td>
</tr>
<tr>
<td>Facebook Class A Inc</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td>Exxon Mobil Corp</td>
<td>1.24</td>
<td>1.24</td>
</tr>
</tbody>
</table>

Sector diversification

<table>
<thead>
<tr>
<th>Sector</th>
<th>Fund</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication services</td>
<td>9.58</td>
<td>9.58</td>
</tr>
<tr>
<td>Consumer discretionary</td>
<td>10.14</td>
<td>10.13</td>
</tr>
<tr>
<td>Consumer staples</td>
<td>6.94</td>
<td>6.94</td>
</tr>
<tr>
<td>Energy</td>
<td>5.07</td>
<td>5.07</td>
</tr>
<tr>
<td>Financials</td>
<td>13.51</td>
<td>13.53</td>
</tr>
<tr>
<td>Health care</td>
<td>15.03</td>
<td>15.02</td>
</tr>
<tr>
<td>Industrials</td>
<td>9.57</td>
<td>9.57</td>
</tr>
<tr>
<td>Information technology</td>
<td>20.28</td>
<td>20.27</td>
</tr>
<tr>
<td>Materials</td>
<td>2.97</td>
<td>2.97</td>
</tr>
<tr>
<td>Real estate</td>
<td>3.65</td>
<td>3.65</td>
</tr>
<tr>
<td>Utilities</td>
<td>3.27</td>
<td>3.27</td>
</tr>
</tbody>
</table>

Fund inception date 31 January 1987  
Data is used for analytical purposes only. Index data may differ to those published by the Index due to calculation methods. Breakdowns may not sum to 100 percent due to rounding, exclusion of cash, STIF and statistically immaterial factors. Portfolio holdings are subject to change and are not intended as a recommendation of individual securities.  
Sources: BlackRock, Frank Russell Company
## Portfolio Value

### Water and Power Retirement Plan

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial value as of 31 August 2010</td>
<td>$531,877,753</td>
</tr>
<tr>
<td>Contributions</td>
<td>$956,003,503</td>
</tr>
<tr>
<td>Withdrawals</td>
<td>($1,347,000,000)</td>
</tr>
<tr>
<td>Interest*</td>
<td>$140</td>
</tr>
<tr>
<td>Change in market value</td>
<td>$1,218,159,139</td>
</tr>
<tr>
<td>Market value as of 31 January 2018</td>
<td>$1,359,040,535</td>
</tr>
</tbody>
</table>

### Retirement Health Benefits Fund

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial value as of 31 August 2010</td>
<td>$119,429,892</td>
</tr>
<tr>
<td>Contributions</td>
<td>$133,446,006</td>
</tr>
<tr>
<td>Withdrawals</td>
<td>($215,919,000)</td>
</tr>
<tr>
<td>Interest*</td>
<td>$448</td>
</tr>
<tr>
<td>Change in market value</td>
<td>$225,178,913</td>
</tr>
<tr>
<td>Market value as of 31 January 2018</td>
<td>$262,136,259</td>
</tr>
</tbody>
</table>

Source: BlackRock  
As of 1/31/2019  
Please note that the change in portfolio value detailed above is only relevant to the Russell 1000 Index Fund managed by BlackRock Institutional Trust, N.A.  
*Interest earned is from assets held in the Money Market Fund which is the sweep vehicle for the Russell 1000 Index Fund.
VI. Fee Schedule
### LADWP Management Fee Schedule

<table>
<thead>
<tr>
<th>Total Assets</th>
<th>Annual fee (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First $500,000,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Above $500,000,000</td>
<td>0.75</td>
</tr>
</tbody>
</table>
Appendix
Important Notes

Past performance does not guarantee future results.

For ease of reference, “BlackRock” may be used to refer to BlackRock, Inc. and its affiliates, including BlackRock Institutional Trust Company, N.A. BlackRock Institutional Trust Company, N.A. ("BTC"), a national banking association operating as a limited purpose trust company, manages the collective investment funds and common trust funds ("collective funds") products and services discussed in this publication and provides fiduciary and custody services to various institutional investors. Collective funds are privately offered: prospectuses are not required. Strategies maintained by BTC are not insured by the Federal Deposit Insurance Corporation or any other agency of the US government, are not an obligation or deposit of, or guaranteed by, BTC or its affiliates

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Important Notes cont’d

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Index
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