LATIN AMERICA’S OTHER WATER INFRASTRUCTURE
Single use, disposable
Spring and mineral sources
Brand-based, with intensive marketing
$.50 to $1.00 per liter

Multiple use, recycled
Processed tap water
Often generic, many small informal vendors
$.05 to $.10 per liter

Source: Zenith International Ltd, 2006, IBWA 2010
LAC bottled water market
(by volume)

30% Single use
70% Bulk size

Source: Zenith International Ltd, 2006, IBWA 2010
Mexico bottled water market
(by volume)

Source: Zenith International Ltd, 2006, IBWA 2010
10 largest bottled water markets
(billions of gallons per year)

- United States: 8750
- Mexico: 7236
- China: 6409
- Brazil: 4378
- Italy: 2863
- Indonesia: 3312
- Germany: 2913
- France: 2241
- Thailand: 2008
- Spain: 1329

Source: Zenith International Ltd, 2006, IBWA 2011
Bottled water market growth
(compound annual rate, 2005-2010)

United States 3%
Mexico 7.8%
China 11.9%
Brazil 6.3%
Italy -0.5%
Indonesia 10.6%
Germany 0.9%
France 0.2%
Thailand 8.8%
Spain -3.1%

Source: Zenith International Ltd, 2006, IBWA 2010

Thursday, November 10, 2011
The Mexico Survey

9 large cities

1,300 low-income households

All with in-home piped water
Survey respondents by household income segment
(U.S. dollars)

- $115 or less: 208
- $115 to $345: 441
- $345 to $575: 311
- $575 to $805: 166
- $805 to $1150: 63
- $1150 to $1725: 17
- $1725 to $2300: 6
- More than $2300: 4

Thursday, November 10, 2011
Do you use water “straight from the tap” to...

- Bathe yourself: 98% YES, 2% NO
- Wash dishes: 96% YES, 4% NO
- Bathe infants: 89% YES, 11% NO
- Brush teeth: 84% YES, 16% NO
- Wash fruits/vegs: 76% YES, 24% NO
- Cook: 54% YES, 46% NO
- Drink: 19% YES, 81% NO
If you don’t drink tap water, how do you obtain drinking water?

- 81% Buy bottled
- 8% Boil it
- 7% Desinfect it
- 2% Filter it
- 2% No answer

Thursday, November 10, 2011
5.8 units per month
40 liters per capita
US$ 11 per month
Annual bottled water consumption
(liters per capita)

- Lebanon: 96 (2003), 121 (2009)
- Italy: 178 (2003), 186 (2009)

IDB 2010 Survey: 480
Total household water spending

- Bottled water: $11.00
- Water & sanitation service bill: $17.00

$28 per month
Perceptions, reality and the lack of information
How often is the piped water service cut off in your neighborhood?

- Rarely/Never: 60%
- Sometimes: 18%
- Frequently/Very frequently: 22%

Average frequency: twice per month
At what point do you think your tap water becomes contaminated?

- In the treatment plant: 19%
- In the pipes/en route: 60%
- In my tank/cistern: 17%
- Don’t know: 4%

Thursday, November 10, 2011
An information vacuum...

A majority of respondents did not know who provides their water/sanitation service.

They could not recall hearing anything in the media regarding the safety of tap water.

They did not know where to obtain information on the quality of tap water.

Thursday, November 10, 2011
Who told you that tap water is...

- Medical doctor: 78%
- Teacher: 8%
- Relatives/Friends: 8%
- Personal experience: 5%
- Mass media: 1%

Safe to drink: 66%
Not safe to drink: 11%
Have you or anyone in your family ever gotten diarrhea because of drinking tap water?

- **NO** 88%
- **YES** 12%

Thursday, November 10, 2011
On a 10 point scale, how do you rate the quality of...

- **Tap water**
  - 9 or 10: 34%
  - 8: 31%
  - 7 or worse: 35%

- **Bottled water**
  - 9 or 10: 51%
  - 8: 30%
  - 7 or worse: 19%

Thursday, November 10, 2011
The outliers: Monterrey and Chihuahua
Do you think your tap water is safe to drink?

Querétaro: Yes 51, No 49
Mexico City: Yes 37, No 62
Tampico: Yes 26, No 73
Chihuahua: Yes 82, No 17
Monterrey: Yes 90, No 10
Guadalajara: Yes 12, No 87
Xalapa: Yes 19, No 81
Villahermosa: Yes 8, No 92
Tuxtla Gutiérrez: Yes 18, No 82

Colors: Blue = Yes, Red = No, Light Blue = Don’t know
How often is piped water service cut off in your neighborhood?

- **Querétaro**: Rarely/Never 54, Sometimes 19, Often/Very often 27
- **Mexico City**: Rarely/Never 47, Sometimes 17, Often/Very often 36
- **Tampico**: Rarely/Never 77, Sometimes 19, Often/Very often 4
- **Chihuahua**: Rarely/Never 58, Sometimes 11, Often/Very often 31
- **Monterrey**: Rarely/Never 87, Sometimes 12, Often/Very often 1
- **Guadalajara**: Rarely/Never 79, Sometimes 16, Often/Very often 5
- **Xalapa**: Rarely/Never 42, Sometimes 25, Often/Very often 33
- **Villahermosa**: Rarely/Never 54, Sometimes 26, Often/Very often 20
- **Tuxtla Gutiérrez**: Rarely/Never 66, Sometimes 24, Often/Very often 10
How do you rate the quality of your tap water?

<table>
<thead>
<tr>
<th>City</th>
<th>9 or 10</th>
<th>8</th>
<th>7 or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Querétaro</td>
<td>22</td>
<td>27</td>
<td>52</td>
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<tr>
<td>Mexico City</td>
<td>34</td>
<td>21</td>
<td>41</td>
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<tr>
<td>Tampico</td>
<td>21</td>
<td>46</td>
<td>22</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>28</td>
<td>46</td>
<td>26</td>
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<tr>
<td>Monterrey</td>
<td>71</td>
<td>23</td>
<td>6</td>
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<td>Guadalajara</td>
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<td>Xalapa</td>
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<td>14</td>
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<tr>
<td>Villahermosa</td>
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<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Tuxtla Gutiérrez</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Thursday, November 10, 2011
If you don’t drink tap water, how do you obtain drinking water?

<table>
<thead>
<tr>
<th>City</th>
<th>Filter</th>
<th>Boil</th>
<th>Disinfect</th>
<th>Buy bottled</th>
<th>Don’t know</th>
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<tbody>
<tr>
<td>Querétaro</td>
<td>3</td>
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<td>4</td>
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<td>Chihuahua</td>
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<td>98</td>
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<tr>
<td>Tuxtla Gutiérrez</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>81</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- Filter
- Boil
- Disinfect
- Buy bottled
- Don’t know

Thursday, November 10, 2011
Average monthly water expenditures

- Querétaro: $21 (Water & Sanitation service bill) + $8 (Bottled water)
- Mexico City: $4 (Water & Sanitation service bill) + $10 (Bottled water)
- Tampico: $20 (Water & Sanitation service bill) + $9 (Bottled water)
- Chihuahua: $13 (Water & Sanitation service bill) + $27 (Bottled water) + $6 (Bottled water)
- Monterrey: $13 (Water & Sanitation service bill) + $6 (Bottled water)
- Guadalajara: $18 (Water & Sanitation service bill) + $12 (Bottled water)
- Xalapa: $22 (Water & Sanitation service bill) + $11 (Bottled water)
- Villahermosa: $3 (Water & Sanitation service bill) + $15 (Bottled water)
- Tuxtla Gutiérrez: $15 (Water & Sanitation service bill) + $14 (Bottled water)
- AVERAGE: $17 (Water & Sanitation service bill) + $11 (Bottled water)
Thank you