Arkansas Fluoridation Process and Cost Analysis

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September 11, 2015
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Delta Dental of Arkansas Mission
- To improve the oral health of Arkansans.
- Through Prevention, Treatment, and Education.

Why Delta Dental?
- Delta makes dental insurance affordable to Arkansans
- Many Arkansans –
  - Do not have dental insurance
  - Cannot afford dental care
- Provides charitable funding

As an oral health leader in Arkansas, we realize there is a disparity across our state, and we believe we have a responsibility to help close this gap.
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Act 197 of 2011

• Requiring municipalities serving 5,000 or more customers to fluoridate water systems

• Without using taxpayer dollars

• Delta Dental of Arkansas Foundation pledged $500,000 to fund fluoridation.
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The Arkansas State Board of Health adopted rules relating to water systems:

1. Concentrations of fluoride
2. Requirements and procedures for maintaining levels
3. Necessary equipment
4. Record keeping
5. Reporting
6. Testing
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Partners for Act 197 of 2011

• Numerous Senate and House Co-Sponsors

• Arkansas State Dental Association and its members

• Arkansas Department of Health

• Delta Dental of Arkansas
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Implementation

• Established Rules and Regulations

• DDAR mailed letters with grant applications to municipal water systems

• Established a grant review committee to determine reasonably accurate startup cost
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• Original estimates failed to account for the full cost to fluoridate!

• Start-up costs included more than water pumps and injection taps. Each system had unique needs to successfully accomplish fluoridation.

• The Delta Dental Foundation Board supported each water departments request for *all* reasonable costs.

• What did this translate to?
Our original pledge of $500,000 turned into over $7 million in capital start-up cost.

Following the second round of grant requests the commitment was 10 times the initial estimate.
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Protecting the Communities’ Investment

• Systems voluntarily discontinuing fluoridation within ten years of the effective date of the agreement, are required to refund the grantor reduced by 10% each year of operation on a prorated basis (e.g., 100% in the first year, 90% in the second year, and so on).

• Should the water department/municipality fail to provide fluoridated water, due to unresolved maintenance/repair for more than six consecutive months, is considered a voluntary discontinuation. Grant will be refunded in accordance with the above paragraph. This provision is effective for ten years.
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- Meanwhile, Act 197 was challenged and a formal opinion was requested by the Arkansas Attorney General.

- Arkansas Attorney General Opinion No. 2013-145

  - Sufficient funds to pay capital start-up costs for fluoridation equipment ... have become available from a source other than tax revenue or service revenue.

  - Delta Dental of Arkansas Foundation provides funds under a grants program which have been examined for the Department of Health and concluded that funder offers are “available” within the meaning of the word used in the act – therefore the statutory condition to the fluoridation requirement has been met.
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• At all times, partners in this effort utilized their skills to address issues facing the mandate.

• Delta Dental of Arkansas partnered with the Arkansas State Dental Association to lobby legislation with the General Assembly, Public Health, and policy makers.

• The ADA was an unlimited resource for information and support.

• The Department of Health was engaged from the beginning writing rules and regulations, enforcing what was approved by the General Assembly, assisting water departments and engineers determine their needs.

• What does funding source support look like?
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Twenty Completed Projects

- Estimated Costs - $3,050,813
- Actual Costs – $2,993,713
- Added to Fluoridated Population – 275,782
- Average Cost per Person - $10.86
- Per Person Cost Spread - $1.11 to $40.14
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Nine Projects Under Construction

• Estimated Costs - $3,684,676
• Costs to Date – $435,422
• Added to Fluoridated Population – 314,485
• Average Cost per Person - $11.72
• Per Person Cost Spread - $3.48 to $31.82
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Six Remaining Projects

• Estimated Costs - $ 1,028,196
• Costs to Date – $ 0
• Added to Fluoridated Population – 58,213
• Average Cost per Person - $ 17.66
• Per Person Cost Spread - $ 11.42 to $ 22.00
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Totals for Thirty-Five Communities

- Estimated Costs - $ 7,763,685
- Added to Fluoridated Population – 648,480
- Average Cost per Person - $ 11.88
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2011
Beginning of Project

- PWS Fluoridated: 60.2%
- PWS Not Fluoridated: 29.8%
- Not on PWS: 10.0%

Percentage of the population with fluoridated water

Healthy People 2010 Fluoridation Benchmark is 75%
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July 31, 2015

Current Status

- PWS Fluoridated: 69.5%
- PWS Not Fluoridated: 20.5%
- Not on PWS: 10.0%

Percentage of the population with fluoridated water

Healthy People 2010 Fluoridation Benchmark is 75%
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Percentage of the population with fluoridated water

Healthy People 2010 Fluoridation Benchmark is 75%
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Estimated At Completion

Percentage of the population with fluoridated water

Healthy People 2010 Fluoridation Benchmark is 75%
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### Percentage of people on Public Water Systems

<table>
<thead>
<tr>
<th></th>
<th>Beginning</th>
<th>At Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoridated</td>
<td>66.9%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Non Fluoridated</td>
<td>33.1%</td>
<td>8.8%</td>
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</tbody>
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