City of Bethel

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Regular City Council Meeting
October 23, 2012
6:30 P.M.
Council Chambers; Bethel, Alaska

City Council Meeting Agenda AMENDED
Regularly Scheduled Meeting
October 23, 2012-6:30 pm
City Hall 300 State Highway, Bethel, AK
City of Bethel Council Chambers

Joseph Klejka
Mayor
Term Expires 2014
543-2984
jklejka@cityofbethel.net

Gene Peltola Jr.
Vice-Mayor
Term Expires 2013
543-3151
gpeltola@cityofbethel.net

Rick Robb
Council Member
Term Expires 2013
543-1879
rrobb@cityofbethel.net

Mary Sattler
Council Member
Term Expires 2013
545-4954
msattler@cityofbethel.net

Mark Springer
Council Member
Term Expires 2013
545-1450
mspringer@cityofbethel.net

Eric Whitney
Council Member
Term Expires 2014
545-1309
ewhitney@cityofbethel.net

Sharon Sigmon
Council Member
Term Expires 2014
543-3452
ssigmon@cityofbethel.net

Lee Foley
City Manager
543-2047
lfoley@cityofbethel.net

Lori Strickler
City Clerk
543-1384
lstrickler@cityofbethel.net

Patty Burley
City Attorney
543-2047
pburley@cityofbethel.net

Paul Richards
Lobbyist
paul_richards@gci.net

I. **CALL TO ORDER**
II. **PLEDGE OF ALLEGIANCE**
III. **ROLL CALL**
IV. **PEOPLE TO BE HEARD** – Five minutes per person
V. **APPROVAL OF CONSENT AGENDA AND REGULAR AGENDA**
VI. **APPROVAL OF MEETING MINUTES**
   a) **P3** *10-9-2012 Regular City Council Meeting Minutes
   b) **P9** *10-15-2012 Special City Council Meeting Minutes
VII. **REPORTS OF STANDING COMMITTEES**
   a) Port Commission
   b) Planning Commission
   c) Public Safety And Transportation Commission
   d) Energy Committee
   e) Finance Committee
   f) Public Works Committee
   g) Parks And Recreation Committee
VIII. **SPECIAL ORDER OF BUSINESS**
   a) Mr. McHugh Pierre, Deputy Director, Department Of Military & Veteran's Affairs, Will Address Council With Respect To The Disposition Plans For The Old Armory Building (City Manager Foley)
IX. **UNFINISHED BUSINESS**
X. **NEW BUSINESS**
   a) **P33** *Introduction of Ordinance 12-06(a): Budget Modification For Fiscal Year 2013 –Acquiring An Interest In Real Property (City Manager Foley)
   b) **P 35** *Introduction of Ordinance 12-08: Acquiring An Interest In Real Property - Alaska Housing Finance Corporation Old Facility; Lot 10, Block 3, Plat 87-6 (City Manager Foley)
   c) **P37** Understanding Impacts & Planning For Climate Change Presentation by John Oscar and Martin Leonard (City Manager Foley)
   d) Council Members' Financial Disclosure Form Modified In Accordance To The Outcome Of The October 6, 2012 Proposition Passage (Council Member Robb)
   e) Discussion/Direction To City Administration To Include The Bethel Basketball League Under The City's Insurance Policy For The 2012/2013 Season (Council Member Sigmon)
XI. **MAYOR'S REPORT**
XII. **MANAGER'S REPORT**
XIII. **CLERK'S REPORT**
XIV. **COUNCIL MEMBER COMMENTS**
XV. **ADJOURNMENT**

Agenda posted on October 17, 2012, at City Hall, AC Co., Swansons, and the Post Office.

Bing Santamour, City Clerk's Office
(Items on the agenda noted with an asterisk (*) are considered the consent agenda.
All Resolutions noted with an asterisk (*) will automatically be adopted on the consent agenda unless removed from the consent agenda by Council.
Ordinances introduced with an asterisk (*) on the consent agenda will automatically be introduced and set for **Public Hearing.**)

Approval of the Minutes

City of Bethel City Council Meeting Minutes

October 9, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

A Regular Meeting of the Bethel City Council was held on October 9, 2012 at 6:30pm, at the City Council Chambers, Bethel, Alaska.

In the absence of Mayor Joseph Klejka and Vice-Mayor Gene Peltola Jr. City Clerk Lori Strickler called the meeting to order.

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

PRESENT: Council Member Kent Harding
Council Member Mary Sattler
Council Member Mark Springer
Council Member Rick Robb
Council Member Eric Whitney

ABSENT: Council Member Gene Jr. Peltola
Council Member Joseph Klejka

STAFF: Recorder Kajena Baty
City Manager Lee Foley

MOVED:	Springer	Motion to elect as Council Member Sattler Mayor Pro Tempore.
SECONDED:	Harding	
Council Member Sattler declined the position of Mayor Pro Tempore.		

MOVED:	Sattler	Motion to elect Council Member Springer as Mayor Pro Tempore.
SECONDED:	Harding	
VOTE ON MAIN MOTION	All in favor	

IV. PEOPLE TO BE HEARD

Leif Albertson- Complete Streets.

Jennifer Dobson- Complete Streets Proposal, Bethel Derby Divas.

Kristy Krish- In support of the Armory and Diabetes Program.

Monica Lineberger- October is Domestic Violence Awareness Month.

Clarence Daniel- Armory, trying to relocate the bus stop at the school.

David Trantham- Would like support for the proclamation of ATG Day.

Kerri Steele- In support of the Armory.

V. APPROVAL OF THE CONSENT AND REGULAR AGENDA

MOVED:	Harding	Motion to approve the consent and regular agenda.
SECONDED:	Sattler	

MOVED:	Harding	Motion to amend to move Item E under special order of business to Item B.
SECONDED:	Sattler	
VOTE ON MOTION	All in favor	

MOVED:	Whitney	Remove new business item 12-22 from consent agenda.
VOTE ON MAIN MOTION	All in favor	

VI. APPROVAL OF THE MEETING MINUTES

Item A - 9-17-2012 Special City Council Meeting Minutes.
Passed on the consent agenda.

Item B - 9-19-2012 Special City Council Meeting Minutes.
Passed on the consent agenda.

Item C - 9-25-2012 Regular City Council Meeting Minutes.
Passed on the consent agenda.

VII. SPECIAL ORDER OF BUSINESS

Item A - Review Canvass Board Certificate Of Election.

Item B - Resolution 12-21: A Resolution Certifying The Results Of The October 2, 2012 Regular City Of Bethel Election.

MOVED:	Whitney	Motion to approve Resolution 12-21
SECONDED:	Harding	
VOTE ON MAIN MOTION	All in favor	

Item C - Oath Administered To Newly Elected Council Member.

Sharon Sigmon and Eric Whitney were sworn in. Council Member Joseph Klejka will be sworn in October 15, 2012.

Item D - Awards Presented To Outgoing Council Member Kent Harding.

Item E - Proclamation for Alaska Territorial Guard Day, October 18, 2012.

VIII. REPORTS OF STANDING COMMITTEES

Item A - Public Safety & Transportation Committee-
No quorum at last meeting, Woo Yoon accepted to Committee.

Item B - Port Commission-
Boats should be taken out of the harbor, dredging will require vehicles to be removed from the harbor area, barges arrived today.

Item C - Planning Commission-
No representative present to be heard.

Item D - Parks and Recreation Committee-
There has not been a meeting since the last council meeting.

Item E - Finance Committee-
No representative present to be heard.

Item F - Public Works Committee-
No representative present to be heard.

Item G - Energy Committee-
Updated a list of potential energy projects.

IX. UNFINISHED BUSINESS

X. NEW BUSINESS

Item A -Resolution 12-22: City Of Bethel Priorities For The Fiscal Year 2014 State Of Alaska Capital Budget.

MOVED:	Whitney	Motion to adopt Resolution 12-22
SECONDED:	Sattler	
VOTE ON MAIN MOTION	All in favor	

Item B - AM 12-33 Appointment of Mr. Woo Yoon To Public Safety & Transportation Commission.

Passed on the consent agenda.

Item C - Possible Cancellation Of The November 13, 2012 Regular City Council Meeting Due To An Expected Lack Of A Quorum And Determination Of A Special Meeting Date Because Of The Cancellation.

MOVED:	Sattler	Motion to cancel the first regular scheduled meeting of November (11-13-2012) due to an expected lack of a quorum.
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

XI. MAYOR'S REPORT

XI. MANAGERS REPORT

XII. CITY CLERK'S REPORT

XIII. COUNCIL MEMBER COMMENTS

Council Member Robb- Thank you Council Member Harding, welcome Council Member Sigmon

Council Member Whitney- Get some reflectors and brush your chimneys.

Council Member Sigmon- Glad to be a part of the city council.

Council Member Springer- Please stay inside of the white safety zone lines along the bike path.

Council Member Sattler- Thank you Council Member Harding, welcome Council Member Sigmon, would like the public to wear reflectors at night.

Council Member Peltola- Not present to be heard.

XV. EXECUTIVE SESSION

Item A- To Discuss Pending And Potential Litigation, The Immediate Knowledge Of Which Would Clearly Have An Adverse Effect Upon The Finances Of The City. AS 44.62.310(c)(1). (City v. Hoffman Fuel Services). The Council May Direct The City Attorney To Take Specific Legal Action During Executive Session In Accordance With AS 44.62.310(b).

MOVED:	Sattler	Motion to go into executive session To Discuss Pending And Potential Litigation, The Immediate Knowledge Of Which Would Clearly Have An Adverse Effect Upon The Finances Of The City. AS 44.62.310(c)(1). (City v. Hoffman Fuel Services). The Council May Direct The City Attorney To Take Specific Legal Action During Executive Session In Accordance With AS 44.62.310(b).
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

XVI. ADJOURNMENT

Joseph A. Klejka, Mayor

ATTEST:

Kajena Baty, Recorder

City of Bethel City Council Meeting Minutes

October 15, 2012 Special Meeting Bethel, Alaska

I. CALL TO ORDER

A Special Meeting of the Bethel City Council was held on October 15, 2012 at 6:30pm in the Council Chambers, Bethel, Alaska.

Mayor Klejka called the meeting to order at 6:30p.

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

PRESENT: Council Member Sharon Sigmon
Council Member Gene Jr. Peltola
Council Member Joseph Klejka
Council Member Mary Sattler
Council Member Rick Robb
Council Member Eric Whitney
Council Member Mark Springer (arrived after roll call 6:34p)

STAFF: City Clerk Lori Strickler
City Manager Lee Foley

IV. PEOPLE TO BE HEARD

Dan Leinberger- Event insurance for City League basket ball is necessary for any event to be held at the school, the cost is extremely high and fiscally not possible. Requested the City consider folding basketball leagues insurance coverage under the City's insurance.

Josephine Davis – Requesting the bus stop shelters be repaired, requested the City's assistance.

Norman and Anna Ayagalria – supported the continued operation of the gym at the old armory.

Shari Neth- As a teacher of the Ayaprun Immersion School, supported the continued operation of the gym at the old armory.

Clarence Daniel –Supported the continued operation of the gym at the old armory.

V. APPROVAL OF THE AGENDA

MOVED:	Springer	Motion to approve the agenda.
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

VI. SPECIAL ORDER OF BUSINESS

Item A-Oath Administered To Newly Elected Council Member Joseph Klejka.

Joseph Klejka read and signed his oath of office.

VII. NEW BUSINESS

Item A- Election Of The Mayor.

MOVED:	Peltola	Motion to nominate Joseph Klejka as the Mayor.
SECONDED:	Sattler	
VOTE ON MAIN MOTION	All in favor	

MOVED:	Sigmon	Motion to close nominations for Mayor.
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

Round One Voting for Mayor:

7 votes in favor of Joseph Klejka. Council Member Joseph Klejka is elected as Mayor.

Item B- Election Of The Vice-Mayor.

MOVED:	Springer	Motion to nominate Gene Peltola Jr. for Vice-Mayor.
SECONDED:	Sattler	
VOTE ON MAIN MOTION	All in favor	

MOVED:	Sigmon	Motion to close nominations for Vice-Mayor.
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

Round One Voting for Vice-Mayor.

7 Votes in favor of Gene Pelotla Jr.. Council Member Peltola is elected as Vice-Mayor.

Item C- Appointment Of Committee/Commission Council Representatives

A) Council Committees and Commissions

1. Parks And Recreation Committee

Council Member Sattler was appointed to the Parks and Recreation Committee.

2. Planning Commission

Council Member Robb was appointed to the Planning Commission.

3. Finance Committee

Council Member Peltola was appointed to the Finance Committee.

4. Public Safety And Transportation Commission

Council Member Sigmon was appointed to the Public Safety and Transportation Commission.

5. Energy Committee

Council Member Whitney was appointed to the Energy Committee.

6. Port Commission

Council Member Springer was appointed to the Port Commission.

7. Public Works Committee

Council Member Klejka was appointed to the Public Works Committee.

B) Senior Center Advisory Committee.

Council Member Robb was appointed to the Senior Center Advisory Committee.

C) Yuut Elitnaurviat
Council Member Sattler was appointed to the Yuut Elitnaurviat Board.

D) Transit Committee
Council Member Klejka was appointed to the Transit Committee.

E) Delta Tobacco Control Alliance
Council Member Springer was appointed to the Delta Tobacco Control Alliance and Council Member Whitney was appointed as the alternate.

Item D- Administration's Update On The Discussions/Negotiations With The Army National Guard and the Lower Kuskokwim School District Concerning The Armory Gym As Well As Bethel Alternative Boarding School and Ayaprun School's Usage Of The Facility.

MOVED:	Sattler	Motion to suspend the rules to hear from Gary Baldwin, Superintendent of LKSD.
SECONDED:	Springer	
VOTE ON MAIN MOTION	All in favor	

MOVED:	Sigmon	Motion to suspend the rules to allow members of the galley to speak on this issue.
SECONDED:	Whitney	
VOTE ON MAIN MOTION	All in favor	

MOVED:	Springer	Motion to adjourn.
SECONDED:	Sattler	
VOTE ON MAIN MOTION	All in favor	

VIII. ADJOURNMENT

_____
Joseph Klejka, Mayor

ATTEST:

_____
Lori Strickler, City Clerk

Reports of Standing Committees

Reports of Standing Committees

City of Bethel, Alaska
Parks and Recreation Committee Minutes

May 7, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

The meeting was called to order by Barb Mosier at 6:12 PM.

II. ROLL CALL

Comprising a quorum of the Committee, the following were present:
Barbara Mosier, Susan Taylor,
Erica Neck, Minnie Sallison Fritts

Excused absence(s): Mary Sattler, Margaret Revet
Unexcused absence(s):
Also in attendance were the following:
Ronda Sargent, Recorder
Janet Athanas, Director

II. SPECIAL ORDER OF BUSINESS

Amanda Colvin Oath of Office

III. PEOPLE TO BE HEARD

1. Leif Albertson-Pinky's Park Bellfield gets a lot of community use and I would like to see some more maintenance on the field for continued use. As users we manage the trash and equipment we use.
2. Zach Fansler- Pinky's Park Bellfield. I would like to see more maintenance on the field. I will volunteer to help with maintenance projects including recruiting volunteers for a project.

IV. APPROVAL OF MINUTES

MOVED BY:	S. Taylor	To approve the minutes of the regular meeting for April 9, 2012.
SECONDED BY:	E. Neck	
VOTE ON MOTION	Unanimously approved	

MOVED BY:	A. Colvin	To make Minnie Sallison Fritts absence for the regular meeting for April 9, 2012 excused due to 2 deaths in the family.
SECONDED BY:	S. Taylor	
VOTE ON MOTION	Unanimously approved	

V. APPROVAL OF AGENDA

MOVED BY:	M. Fritts	To approve the agenda.
SECONDED BY:	S. Taylor	
VOTE ON MOTION	Unanimously approved	

VI. DEPARTMENT HEAD REPORT

VII. UNFINISHED BUSINESS

a. Open House-

MOVED BY:	M. Fritts	To hold the Open House on Saturday, October 20, 2012 from 11:00 am - 3:00 pm
SECONDED BY:	S. Taylor	
VOTE ON MOTION	Unanimously approved	

VIII. NEW BUSINESS

a. 4th of July activities- the committee brainstormed some ideas and is looking to hearing back from student council on their participation.

XI. MEMBER COMMENTS

Mosier: Welcome Amanda! I am excited about writing letters to Gov. Parnell about supporting the pool project.

Sallison Fritts: So glad it is not 50 below anymore!

Colvin: Glad the park is going in Tundra Ridge. Little League will be using the High School Fields this season.

XII. ADJOURNMENT

MOVED BY:	S. Taylor	To adjourn the meeting
SECONDED BY:	M. Sattler	
VOTE ON MOTION	Unanimously approved	

With no further business before the Committee, the meeting adjourned at 7:30 PM.

*****The Parks & Recreation committee voted at the February meeting to not meet over the summer (JUNE, JULY & AUGUST). The next regular meeting will be September 10, 2012. *****

APPROVED THIS 17 DAY OF Sept, 2012.

Barbara Mosier, Chair

Ronda A. Sargent, Committee Secretary

City of Bethel, Alaska
Energy Committee

September 4, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Energy Committee held on September 4, 2012 at 6:30 pm in the City Hall Council Chambers, Bethel, Alaska.

Chair, Leif Albertson called the meeting to order at 6:32 pm.

II. ROLL CALL

Compromising a quorum of the Committee, the following members were present for roll call:

Present:
Leif Albertson
Shari Neth
Greg McIntyre
Mary Weiss

Absent:
Eric Whitney (excused)

Ex-Officio members present were the following:
Eric Johnson

III. PEOPLE TO BE HEARD
John Sargent

IV. APPROVAL OF AGENDA

MOVED:	Shari Neth	Motion to amend the agenda of September 4, 2012 for item A to begin the meeting.
SECONDED:	Mary Weiss	
VOTE ON MAIN MOTION	All in favor.	

MOVED:	Shari Neth	Motion to adopted the amended agenda of September 4, 2012.
SECONDED:	Greg McIntyre	
VOTE ON MAIN MOTION	All in favor.	

VII. NEW BUSINESS

A.

MOVED:	Gary McIntyre	Motion to enter a committee of the whole.
SECONDED:	Shari Neth	
VOTE ON MAIN MOTION	All in favor.	

MOVED:	Eric Whitney	Motion to resume the regular meeting.
SECONDED:	Greg McIntyre	
VOTE ON MAIN MOTION	All in Favor.	

MOVED:	Eric Whitney	Motion to postpone.
SECONDED:	Greg McIntyre	
VOTE ON MAIN MOTION	All in favor.	

V. APPROVAL OF THE MEETING MINUTES

MOVED:	Mary Weiss	Postpone adoption of minutes.
SECONDED:	Greg McIntyre	
VOTE ON MAIN MOTION	All in favor.	

VI. OLD BUSINESS

No old business required a main motion.

VII. NEW BUSINESS

C.

MOVED:	Greg McIntyre	Motion to enter a committee of the whole.
SECONDED:	Mary Weiss	
VOTE ON MAIN MOTION	All in favor.	

MOVED:	Greg McIntyre	Motion to resume the regular meeting.
SECONDED:	Mary Weiss	
VOTE ON MAIN MOTION	All in Favor.	

MOVED:	Mary Weiss	Direct council chair Albertson to discuss proposed ideas with the Lori Strickler.
SECONDED:	Greg McIntyre	
VOTE ON MAIN MOTION	All in favor.	

VIII. COMMISSION MEMBER'S COMENTS

IX. ADJOURNMENT

MOVED:	Mary Weiss	Motion to adjourn.
SECONDED:	Shari Neth	
VOTE ON MAIN MOTION	All in favor.	

Meeting ended at 8:30 pm.

Next meeting on May 7, 2012

Leif Albertson, Chair

ATTEST:

Eric Johnson, Recorder

City of Bethel, Alaska
Energy Committee

October 1, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Energy Committee held on October 4, 2012 at 6:45 pm in the City Hall Conference Room, Bethel, Alaska.

Chair, Leif Albertson called the meeting to order at 6:45 pm.

II. ROLL CALL

Compromising a quorum of the Committee, the following members were present for roll call:

Present:
Leif Albertson
Shari Neth
Mary Weiss
Eric Whitney (By phone.)

Absent:
Greg McIntyre

Ex-Officio members present were the following:
Annette Sutton

III. PEOPLE TO BE HEARD

IV. APPROVAL OF AGENDA

MOVED:	Eric Whitney	Motion to approve the Agenda of October 1, 2012.
SECONDED:	Shari Neth	
VOTE ON MAIN MOTION	All in favor	

V. APPROVAL OF THE MEETING MINUTES

MOVED:	Shari Neth	Motion to approve the September 4, 2012 Meeting Minutes. Approved with typo correction.
SECONDED:	Mary Weiss	
VOTE ON MAIN MOTION	All in favor	

VI. SPECIAL ORDER OF BUSINESS

None

VII. OLD BUSINESS

Discussion, but no motions made.

VIII. NEW BUSINESS

Discussion, but no motions made.

IX. COMMITTEE MEMBER'S COMENTS

Eric Whitney – Intrigued by the Waste of Energy Processing Procedure. He would like to pursue it and hopes to have more information at next meeting.

Mary Weiss – Glad that the Energy Committee Meeting.

Shari Neth – Expressed concern that she did not get a reminder that morning for the Meeting and would like one in the future.

Leif Albertson – Waiting on Eric Johnson, the Assistant Finance Director for the City to get back with him on information for the container tax.

X. ADJOURNMENT

MOVED:		
SECONDED:		
VOTE ON MAIN MOTION	All in favor	

Meeting Adjourned at pm.

Next meeting on November 5, 2012

Leif Albertson, Chair

ATTEST:

Annette Sutton, Recorder

City of Bethel, Alaska
Planning Commission

October 11, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Planning Commission was held on October 11, 2012 at 6:30 pm in the City Hall Council Chambers, Bethel, Alaska.

Chair, John Guinn, called the meeting to order at 6:35 pm.

II. ROLL CALL

Compromising a quorum of the Commission, the following members were present for roll call:

Joy Shantz, Rick Robb (telephonically), John Guinn, Mike Walters; Absent: Abe Palacios and Cliff Linderoth.

Ex -Officio members present were the following:

Rachael Pitts, Planning Director Betsy Jumper, Recorder

III. PEOPLE TO BE HEARD: None.

IV. APPROVAL OF AGENDA

MOTION TO APPROVE THE AGENDA OF September 13, 2012

MOVED:	Joy Shantz	To approve the agenda for the Oct. 11, 2012 meeting.
SECONDED:	Mike Walter	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

V. APPROVAL OF MINUTES

MOTION TO APPROVE THE MINUTES FROM the Sept. 13, 2012 Meeting

MOVED:	Joy Shantz	To approve the minutes of the Sept. 13, 2012 meeting.
SECONDED:	Rick Robb	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

VI. COMMUNICATIONS: Rachael went over the planner's report for September; the National Flood Insurance Program is having some changes and flood insurance rates may go up; a copy of the planning fees/procedures are in the planning packets to make things easier for people, although we're always here to assist them; blighted properties/abandoned properties

continue to an be ongoing issue, we're trying to think of ways to remedy. Junk vehicles and site plan permits issued were covered as well for the month of September.

VII. COMMISSIONER'S COMMENTS: Mike, sorry I missed last two meetings, look forward to the rest of the year; Rick, the swimming pool RFP went out and the voters voted, no APOC anymore, although the City Council will come up with their own rules; Joy, no comments; John; sorry I missed the last two meetings.

VIII. NEW BUSINESS: A. Planning Director Presentation – Zoning Overlays: The Planning Director gave a power point presentation to the group on zoning overlays.

B. **Proposed ONC Residential Subdivision**-A preapplication/preliminary meeting was held on Oct. 2nd in regards to a residential subdivision.

IX. UNFINISHED BUSINESS: A. Resolution 2012-2: Approval of the Planned Unit Development (PUD) Zoning Overlay for the Pre-maternal Home and Assisted Living Home:

MOTION TO APPROVE the PUD Resolution

MOVED:	Joy Shantz	To approve resolution 2012-2 approving the PUD zoning overlay.
SECONDED:	Mike Walter	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

B. Fees and Procedures for the Planning Dept. Rachael went over the draft handout of the fees and procedures for the Planning Dept., with a flow-chart and steps included to make various processes more clear.

C. Bethel Native Corporation (BNC) Kipsuvik (the new Swanson's Store/theater Site): Ana Hoffman of BNC spoke of the plans for the Kipsuvik site, with groundwork being done now, and hopefully construction will begin next summer.

X. ADJOURNMENT, Motion to adjourn the meeting.

MOVED:	Joy Shantz	To adjourn the meeting at 7:45.
SECONDED:	Rick Robb	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

Next meeting on November 8, 2012

John Guinn, Chairman

Betsy Jumper, Recorder

City of Bethel, Alaska
TRANSIT COMMITTEE

Sept. 27, 2012 Regular Meeting Bethel, Alaska

I. CALL TO ORDER

A regular meeting of the Transit Committee was held on Sept. 27, 2012 at 6:30 pm at the ONC Office Building, in Bethel, Alaska.

Transit Chair Glen Watson called the meeting to order at 6:30 pm.

II. ROLL CALL

Compromising a quorum of the Committee, the following members were present for roll call: Glen Watson, Joe Klejka, Willie Kepple, and Luke Smith; Absent: Sam Samuelson and Arvin Dull; also present, John Sargent, COB Grant Manager and Brenda George, Acting Transit manager/recorder.

III. APPROVAL OF THE MINUTES: This was tabled as there was no quorum last month.

IV. APPROVAL OF AGENDA

MOTION TO APPROVE THE AGENDA OF Sept. 27, 2012

MOVED:	Luke Smith	To approve the Sept. 27th agenda, but with changes, under new business, Items A and B to be combined.
SECONDED:	Glen Watson	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

V. **TRANSIT MANAGER'S REPORT:** Brenda George gave an overview of the manager's report; there's only 2 drivers currently, myself fulltime, and a parttime driver; and tomorrow only one bus operating due to one person out sick. We're still making money. A suggestion was made to give organizations who spend a big chunk of money to give them some advertisement space on the buses, and another idea was to sell space for adverts. Route changes and fees were discussed briefly as well.

VI. **OLD BUSINESS: A. Operations-Present (July 2012) and Plans for the Near Future:** 1st quarter numbers were given; the handout that was provided was gone over, with all the numbers/figures—although it was suggested to make things more readable/understandable. **B: Itemized Transit Costs Covered/Not Covered by IRR:** Again, numbers were gone over. **C: FTA Section 5311 Grant Parameters (John Sargent)** John Sargent stated via the State grant agreement, that every dollar spent has to be matched evenly, i.e., no "piece-mealing". Federal to the State, State to us. Talk to Don Young about transit issues. **D: FTA Section 5311 Grant Amount for FY2013 (John Sargent)** (this was skipped) **E: Potential New Grants for Funding Transit Operations** (this was not discussed).

VII. **NEW BUSINESS: A. Strategic Plan and B. 6 Month Plan:** We need to have something on paper so we can see what the purpose of the plan is; it would help us when we meet with council. What's our mission/vision? Who do we serve? Can other organizations/villages chip in money? We need more than this meeting to develop/discuss further; can we set a date for strategic plan development within our group? Oct. 8th was the date decided from 10-

12pm. **C: 1- Year Plan:** (not discussed) **D: Financial Status of Transit System:** (not discussed).

VIII. COMMITTEE MEMBER COMMENTS: Joe, one of our best meetings, happy and thank you to ONC for their generosity; **John,** lots of really good ideas shared, now for the hard part of turning the ideas into reality, also, keep in mind the human services coordinated plan for 5310 money; **Brenda**, this has been a good experience for my first time, doing both driving the bus and transit manager duties; **Willie,** think we're gaining everytime we have a meeting and am happy to help; **Luke,** I think this has been one of the more productive meetings and look forward to making things better; **Glen,** I just want to thank everyone, this is a hard committee to be on, what with all the ONC/COB concerns.

IX. ADJOURNMENT

Motion made to adjourn meeting

MOVED:	Joe Klejka	To adjorn the meeting at 735 pm.
SECONDED:	Willie Kepple	
VOTE ON MAIN MOTION	All in favor 4-0 Motion passes; 4 yes and 0 opposed.	

X.

Special Order of Business

Special Order of Business

Unfinished Business

Unfinished Business

New Business

New Business

Placeholder for Introduction of Ordinance 12-06(a)

Placeholder for Introduction of Ordinance 12-08

ClimateWise®

Helping communities prepare for a changing climate.

Preparing Natural and Human Communities for Climate Change

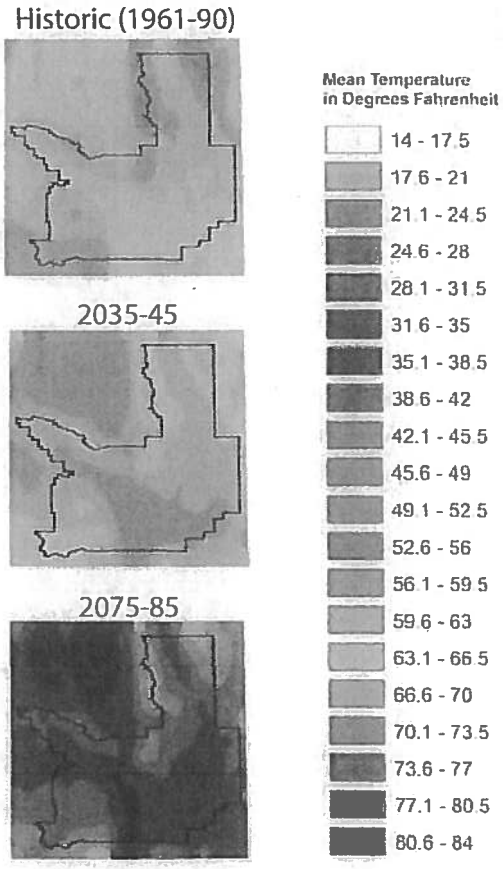
Photo courtesy of J. Zimmerlin

The Need for Climate Change Adaptation

Climate change is well underway. Global temperatures have increased 1.5° F. Sea level has risen 8 inches. Forest and rangeland fires have increased. Fish, wildlife, and plants are on the move. Climate change is expected to progress more quickly throughout the next century. Many changes will occur regardless of how well we curtail future greenhouse gas emissions, so we need to prepare for those impacts in order to protect people, our water and lands, and wildlife. Preparing for and responding to a changing climate is called climate change "adaptation." Unfortunately, we can no longer simply use past conditions to plan for the future.

About the Process

At the Geos Institute, we developed a process that walks a community, watershed, Tribe, county, federal planning unit, or region through understanding impacts and planning for climate change. An important component of the process is that it works across both socioeconomic and natural systems. The ClimateWise® process begins by compiling information about local impacts of climate change, based on output from climate models and studies of ecological effects. When available, we combine this information with Traditional Ecological Knowledge from tribal members.



Historic and projected future temperature across Missoula County based on the HadCM general climate model. We consult numerous models as part of the ClimateWise® process.

Individual steps in the process include:

1. Develop Strong Local Partnerships. Local leaders and experts are tasked with helping to guide the process and identify avenues for implementation. Partners with capacity, community standing, and political influence are ideal. A guiding committee with diverse representation is convened.

2. Identify Regional Impacts. We work closely with scientists and Tribal elders to collect information for a report that provides an overview of climate change projections specific to the resources and region of interest. In a series of meetings and workshops with local experts and leaders, we determine how these projections will translate to on-the-ground impacts.

3. Identify Vulnerabilities. Species and ecosystem vulnerabilities to climate change are identified by experts during a Natural Systems workshop. We also work with social scientists and community experts to determine the vulnerability of local scoioeconomic systems. The five main systems that we consider include infrastructure (buildings, roads, energy supply, etc.), social services (emergency response, health, disadvantaged populations, etc.), economics (business, agriculture, forestry, tourism, etc.), culture (ceremonies, language, etc.), and natural resources (including species important to subsistence and medicine).


Photo courtesy of NOAA

4. Develop and Prioritize Adaptation Strategies. In our Natural Systems workshop, we ask scientists and managers to develop a suite of strategies for maintaining species and ecosystems under a changing climate. These experts then present this information at a Socioeconomic workshop where local leaders and experts build

Typical participants in the ClimateWise process include:

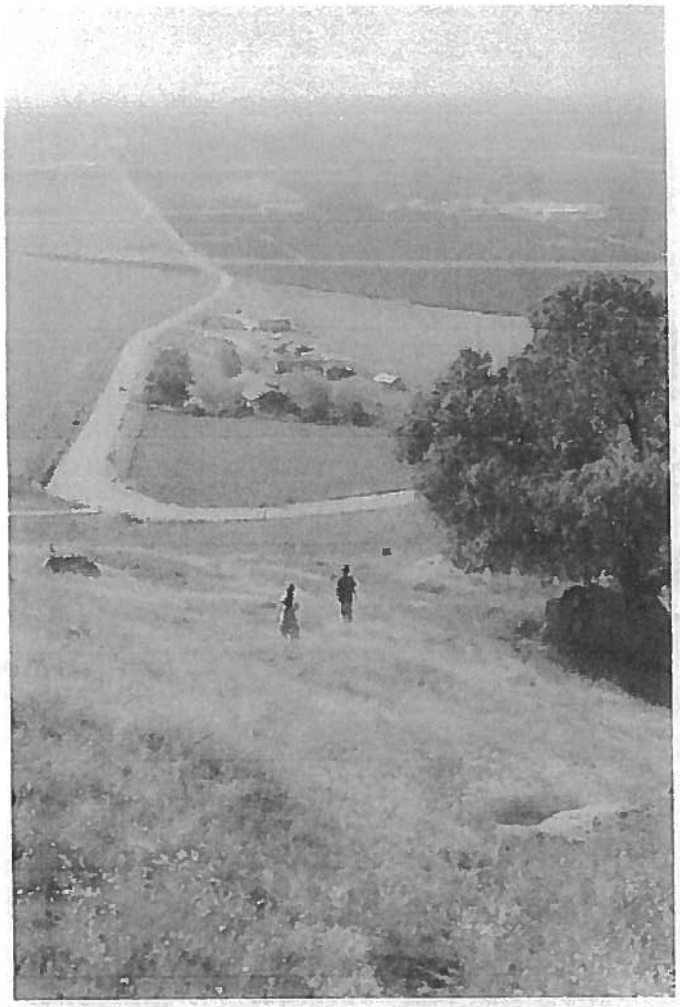
- Natural resource scientists and managers
- Wildfire experts
- Water distribution and storage experts
- Tribal governments and leaders
- Renewable energy representatives
- City and county planners and engineers
- Emergency response officials
- Health care professionals
- Tourism industry representatives
- Farmers and ranchers
- Church leaders
- Minority and low income advocates
- Business leaders
- Elected officials
- Federal and state agencies such as USFS
- Local NGOs

cohesive strategies to reduce the vulnerability of the local community while supporting the natural systems they depend on for resources and quality-of-life.

5. Identify Opportunities for Collaboration. Together with our local partners, we put together a report that gives an over-view of the process and local climate projections. This report provides integrated strategies for preparing the community and its natural resources for climate change in a cohesive manner. Strategies are prioritized and steps for implementation are outlined. New potential partnerships and opportunities for working synergistically are emphasized.

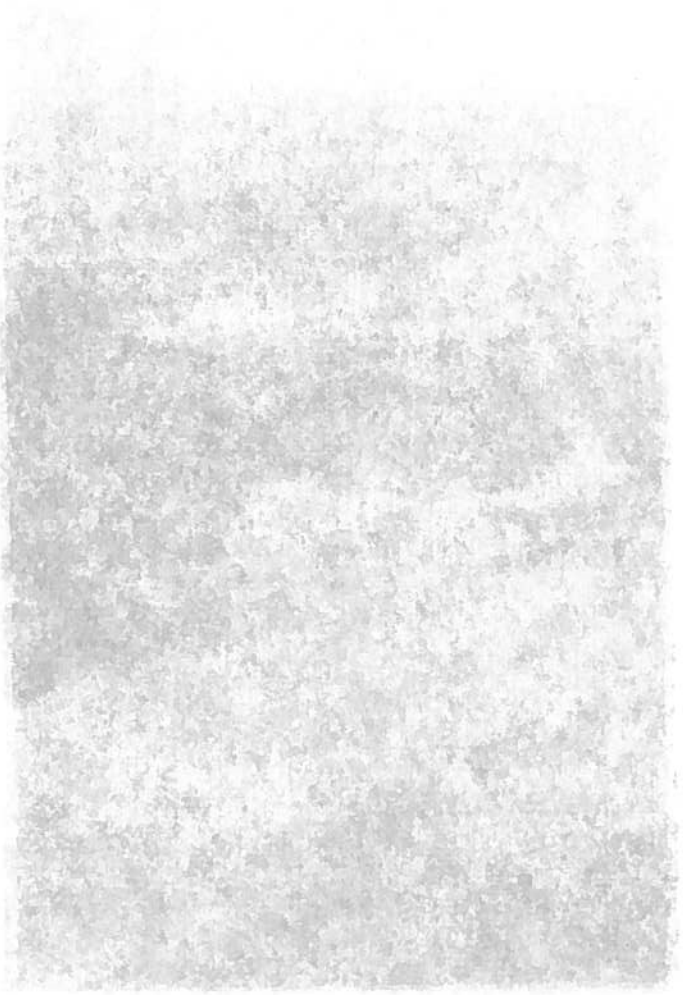
6. Implement Adaptation Strategies. We start the conversation on implementation at the very beginning of the adaptation planning process. Having those individuals responsible for implementation participate in the workshop is especially important. Implementation can occur in a variety of different ways depending on specific strategies, political will, availability of new partnerships, and on-going efforts. "Mainstreaming" or moving adaptation strategies into ongoing planning and implementation efforts (Forest Plans, County zoning, etc.) is one promising avenue for implementation.

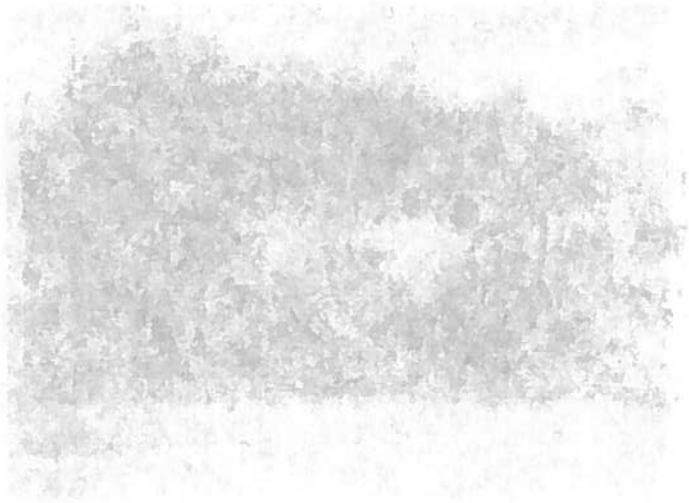
7. Monitoring and Evaluation. Effective strategies for preparing a community and the resources it relies on for climate change vary from region to region. Many strategies need to be tested on a small scale to determine efficacy before being carried out across larger landscapes. As climate change progresses, surprises are likely, and sudden changes in management approach will be needed.



Why it Works

ClimateWise is unique in its interdisciplinary approach to developing strategies that are integrated across the different sectors of the community. Such a unique approach is needed due to the severity and diversity of problems we face as the climate continues to change. Working across sectors now reduces future conflict over increasingly scarce resources. It also allows a community to maximize their return on investment by addressing common issues in a strategic and collaborative manner. Finally, it prevents actions in one sector from unintentionally exacerbating climate change impacts to other sectors.





ClimateWise in San Luis Obispo County, California

We carried out a ClimateWise process in San Luis Obispo County in 2010. Through our scientific assessment and local meetings and workshops, the following impacts to the region were identified:

- Longer, hotter summers
- Lower streamflow levels in late summer/fall
- Lower groundwater recharge
- Increased risk of flooding and dam failure
- Lower water quality
- Loss of native species, including pine forests
- Declines in forage for cattle
- Declines in wine grape production
- Erosion of beaches and bluffs
- Risk to coastal infrastructure, including a waste treatment plant and nuclear power plant
- Salt water intrusion into coastal wells

"The ClimateWise® process organized by the Geos Institute was marvelous in the way it brought together decision makers and citizens to share information about climate change. San Luis Obispo's decision process toward grass roots sustainability was made a whole lot easier by this. Two aspects really gave a jump start to helping city and regional planners: getting the Geos scientific expertise input early on; and getting the major stakeholders on board. The outcome of this process also helped fuel a successful grant for the city and region."
-Jan Marx, Mayor of San Luis Obispo

Some recommended strategies included:

- Prioritize water conservation, especially in agriculture, by providing support for new equipment
- Monitor groundwater pumping to determine sustainable levels
- Encourage low impact development, natural filtration, and storm water catchments
- Identify populations at risk due to limited road access during emergencies
- Provide education and incentives for land management that reduces runoff and erosion
- Encourage rolling easements along the coast rather than coastal armoring (sea walls)
- Increase habitat buffers and connectivity for wildlife
- Increase maintenance of dams, culverts, and roads
- Provide support for agriculture to increase crop diversity and flexibility

GEOS INSTITUTE

For more information, please contact
Marni Koopman, Climate Change Scientist
541.482.4459; marni@geosinstitute.org

ALASKA PUBLIC OFFICES COMMISSION
2221 E. NORTHERN LIGHTS, #128
ANCHORAGE, AK 99508-4149
907/276-4176 - FAX 276-7018

ALASKA PUBLIC OFFICES COMMISSION
2007 PUBLIC OFFICIAL FINANCIAL DISCLOSURE STATEMENT
GENERAL INFORMATION

1. This report is required of State and Municipal Public Officials, State Board and Commission Members, Candidates for governor and lieutenant governor, for the legislature (UNLESS YOU ARE AN INCUMBENT LEGISLATOR) and for Municipal Office.

2. This report discloses financial activities for the preceding calendar year; you must **include any information about your financial interests held between January 1, 2006 and December 31, 2006.**

3. The law requires you to disclose your financial interests and those held by your spouse, domestic partner, or dependent children during the preceding calendar year.

NOTES: ***Board & Commission members and Municipal officers are not required to disclose close economic associations;***
Municipal officers are not required to disclose information about their domestic partner.

4. If you need help, call APOC at 276-4176.

THIS REPORT IS A SWORN STATEMENT.
YOU MUST CERTIFY IT WITH YOUR SIGNATURE ON THE LAST PAGE.

NAME: _____
Phone **Fax Number**

MAILING ADDRESS: _____
(Current Street Address or Post Office Box) **E-Mail Address**

_____
(City/Town and Zip Code)

NAME OF SPOUSE OR DOMESTIC PARTNER: _____

NAME(S) OF YOUR DEPENDENT CHILDREN: _____

ARE YOU A CANDIDATE? (CHECK ONE): State ☐ Municipal ☐

WHAT OFFICE DO YOU SEEK? _____

IF YOU ARE **NOT A CANDIDATE** IS THIS YOUR (CHECK ONE):

☐ **INITIAL STATEMENT?** You are a recently appointed state or municipal official,

☐ **ANNUAL STATEMENT?** You are an incumbent Public Official. **(Due by March 15)**

☐ **FINAL STATEMENT?** You have left office. **(Due 90 days after leaving office)**
A Final Statement covers a reporting period beginning January 1, 2007 through the date you leave office.

WHAT POSITION REQUIRES YOU TO FILE THIS STATEMENT? _____

SCHEDULE A
SOURCES OF INCOME OVER $1,000
1. SALARIED EMPLOYMENT

Salaried Employment **If NONE reportable, check box →** ☐

Report the name of each employer who paid you, your spouse, domestic partner or dependent children more than $1,000 during calendar year 2006.

Name of filer, spouse, domestic partner, or child:

Employer's Name:

Employer's Address:

Description of Services Provided:

Total Amount: $ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income

Name of filer, spouse, domestic partner, or child:

Employer's Name:

Employer's Address:

Description of Services Provided:

Total Amount: $ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income

Name of filer, spouse, domestic partner, or child:

Employer's Name:

Employer's Address:

Description of Services Provided:

Total Amount: $ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income

SCHEDULE A

SOURCES OF INCOME OVER $1,000

2. SELF EMPLOYMENT
Non-Retail Business

Self-Employment – Non Retail Business **If NONE reportable, check box →** ☐

For a business that is non-retail, you must list the fist and last name and mailing address of each client or customer who paid the business over $1,000. You must also disclose the amount over $1000 paid by each client. Self-employment includes: a sole proprietor, partnership, limited liability company, shareholder in a professional corporation; or if you held (individually or with another family member) more than 50% of the stock in a corporation.

Name of filer, spouse, domestic partner, or child : _____

Business Name: _____

Business Address: _____

Description of Services Provided: _____

_____

Name and address of client/customer: _____

Total Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income _____

Name and address of client/customer: _____

Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income _____

Name and address of client/customer: _____

Total Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income _____

Name and address of client/customer: _____

Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income _____

Name and address of client/customer: _____

Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Approximate Number of Hours Worked to Earn Income _____

Use additional pages for each company or for additional clients/customers.

SCHEDULE A

SOURCES OF INCOME OVER $1,000

3. SELF EMPLOYMENT
Retail Business

Self-Employment – Retail Business **If NONE reportable, check box →** ☐

List the name and address of each self-employment business that was a source of income of more than $1,000 for you, your spouse, domestic partner or dependent child during calendar year 2006.

Self-employment includes: sole proprietor, partnership, limited liability company, shareholder in a professional corporation; or if you held (individually or with another family member) more than 50% of the stock in a corporation.

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Description of Services Provided: _____

_____

Total Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Description of Services Provided: _____

_____

Total Amount: $_____ Paid by (check one) Hour ☐ Month ☐ Year ☐ Commission ☐

4. Rental Income

Rental Income **If NONE reportable, check box →** ☐

List the first and last name of each tenant who paid more than $1,000 in rent during **calendar year 2006.** If property is located outside Alaska and managed by a person other than you, your spouse, domestic partner or dependent child, you may list the managing agent instead of listing each tenant.

Owner (filer, spouse, domestic partner, or child): Name(s) of Tenant(s)

_____ _____

Amount of Rent Paid: $_____

_____ _____

Amount of Rent Paid: $_____

_____ _____

SCHEDULE A
SOURCES OF INCOME OVER $1,000

5. Dividends & Interest

Dividends and Interest **If NONE reportable, check box →** ☐

Report the name of the source and amount of all dividends, interest and capital gains over $1,000 earned during **calendar year 2006** such as Dean Witter Money Market Acct. or CD's in ABC Bank.

- List the name(s) and amount of the asset(s) (not in a retirement account) which paid you, your spouse, domestic partner or child dividends, interest or capital gains of more than $1,000 last year such as IBM stock or Cordova Municipal Bonds.

(Report the assets of a retirement account or trust on Schedule D, page 7)

Recipient (filer, spouse, domestic partner, or child):	Name of Source	Amount of Income

6. Other Income

Other Income **If NONE reportable, check box →** ☐

List each source and amount of income over $1,000 not listed elsewhere on this statement, including income from public assistance, workman's compensation, unemployment, the name of the buyer of real property; social security; retirement; the name of the person who paid alimony or child support; government entitlements; honoraria and shared living expenses.

Recipient (filer, spouse, domestic partner, or child):	Name of Source	Amount of Income

7. Gifts

Gifts **If NONE reportable, check box →** ☐

List the source and value of gifts which have a value of, or cumulative value of, more than $250 **except** gifts from a spouse, domestic partner, parent, child, sibling, grandparent, aunt, uncle, niece or nephew. **Some** examples of gifts include: cash, a debt that is forgiven, scholarships, and discounts not extended to the general public.

Recipient (filer, spouse, domestic partner or child)	Name of Source	Value of Gift

SCHEDULE B

BUSINESS INTERESTS

Business Interests **If NONE reportable, check box →** ☐

Report all business interests even if they were **NOT** a source of income to you, your spouse, domestic partner, or dependent child during **calendar year 2006.**

- List ownership interests or options to buy more than $1000 as a shareholder in publicly traded stocks that are not listed elsewhere on this form. (A list of the names of publicly traded stocks such as IBM or Intel may be listed by name only on a separate page.)
- List ownership interests or options to buy non-publicly traded companies such as a sole proprietor, shareholder, owner, partner, officer, or director including ownership interests in native corporations.
- List interests in limited liability companies.
- List director or officer position in profit and non-profit organizations.

Describe the business activity with sufficient detail to tell a reader what the organization actually does.

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Nature of Interest: _____

Description of Business's Activity: _____

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Nature of Interest: _____

Description of Business's Activity: _____

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Nature of Interest: _____

Description of Business's Activity: _____

Name of filer, spouse, domestic partner, or child: _____

Business Name: _____

Business Address: _____

Nature of Interest: _____

Description of Business's Activity: _____

SCHEDULE C

REAL PROPERTY INTERESTS/RENT TO OWN

Real Property Interests **If NONE reportable, check box →** ☐

Report all property interests such as your home, neighboring lots, rent to own home, rental property, vacant, recreational, business property or limited partnerships including real estate interests held in an LLC; or held through a trust or sold during **calendar year 2006.**

Include a street address, city and state <u>or</u> complete legal description for each piece of property listed. <u>**Do not**</u> use mile post markers or post office boxes.

Use copies of this page if you need additional space to complete this section.

Name of filer, spouse, domestic partner, or child: ______________________

Street Address or Legal Description: ______________________

City or Borough and State: ______________________

Nature of Interest: ______________________ ______________________
(Option to Buy, Ownership, Leasehold) Current Use (Optional)

Name of filer, spouse, domestic partner, or child: ______________________

Street Address or Legal Description: ______________________

City or Borough and State: ______________________

Nature of Interest: ______________________ ______________________
(Option to Buy, Ownership, Leasehold) Current Use (Optional)

Name of filer, spouse, domestic partner, or child: ______________________

Street Address or Legal Description: ______________________

City or Borough and State: ______________________

Nature of Interest: ______________________ ______________________
(Option to Buy, Ownership, Leasehold) Current Use (Optional)

Name of filer, spouse, domestic partner, or child: ______________________

Street Address or Legal Description: ______________________

City or Borough and State: ______________________

Nature of Interest: ______________________ ______________________
(Option to Buy, Ownership, Leasehold) Current Use (Optional)

Name of filer, spouse, domestic partner, or child: ______________________

Street Address or Legal Description: ______________________

City or Borough and State: ______________________

Nature of Interest: ______________________ ______________________
(Option to Buy, Ownership, Leasehold) Current Use (Optional)

SCHEDULE D

BENEFICIAL INTEREST IN TRUSTS & RETIREMENT ACCOUNTS
Exceeding $1,000

Trusts & Retirement Accounts **If NONE reportable, check box →** ☐

Report each beneficial interest in a trust or retirement account held by you, your spouse, domestic partner or dependent children that exceeded $1,000 during **calendar year 2006**. Retirement accounts include **employee benefit accounts (pension and profit-sharing accounts), deferred compensation plans, and retirement accounts (IRA, 401K, SEP or Keogh)**. Assets of a trust or retirement account include stocks, bonds, mutual funds, cash accounts, CD's, real property.

- Name the trustor (the person or employer who provided the funds or assets for the trust or retirement account).
- If a trust or retirement account is self directed, also list the assets by name such as IBM stock or Templeton Growth Fund.

Name of filer, spouse or domestic partner, or child: Extent of Interest (Percent)

Name of the person, employer or entity that provided the funds or assets (Trustor)

Name(s) of the stocks, bonds, mutual funds or other assets contained in the retirement account or trust

Name of filer, spouse or domestic partner, or child: Extent of Interest (Percent)

Name of the person, employer or entity who provided the funds or assets (Trustor)

Name(s) of the stocks, bonds, mutual funds or other assets contained in the retirement account or trust

Name of filer, spouse or domestic partner, or child: Extent of Interest (Percent)

Name of the person, employer or entity who provided the funds or assets (Trustor)

Name(s) of the stocks, bonds, mutual funds or other assets contained in the retirement account or trust

Name of filer, spouse or domestic partner, or child: Extent of Interest (Percent)

Name of the person, employer or entity who provided the funds or assets (Trustor)

Name(s) of the stocks, bonds, mutual funds or other assets contained in the retirement account or trust

SCHEDULE E
LOANS, LOAN GUARANTEES, AND DEBTS OF $1,000 OR MORE

Loans, Loan Guarantees, and Debts **If NONE reportable, check box →** ☐

Report the name of each creditor or lender to whom more than $1,000 was owed during **calendar year 2006** by you, your spouse, domestic partner, or dependent children.

List financial obligations including mortgages on property sold during **calendar year 2006**; loans that have been guaranteed; delinquent taxes, alimony, child support payments; medical bills; mortgage, boat and auto loans; business and personal loans; escrow's; student loans; signature loans; and promissory notes. Loans include secured, unsecured and contingent loans. Do not report credit card obligations or revolving charge accounts.

Circle whether the entity is a lender, creditor or guarantor. See page 23 of the manual for more help with this section.

Name of Debtor (filer, spouse, domestic partner or child)	Name of Lender/Creditor/Guarantor
Name of Debtor (filer, spouse domestic partner or child)	Name of Lender/Creditor/Guarantor
Name of Debtor (filer, spouse, domestic partner or child)	Name of Lender/Creditor/Guarantor
Name of Debtor (filer, spouse, domestic partner or child)	Name of Lender/Creditor/Guarantor
Name of Debtor (filer, spouse, domestic partner or child)	Name of Lender/Creditor/Guarantor
Name of Debtor (filer, spouse, domestic partner or child)	Name of Lender/Creditor/Guarantor

NATURAL RESOURCE LEASES

Natural Resource Leases **If NONE reportable, check box →** ☐

List all natural resource leases, including mineral, timber, or oil leases bid held or offered during **calendar year 2006**. Report this information for yourself, your spouse, domestic partner or dependent child who was a sole proprietor, a partnership or professional corporation, a limited liability company; or a corporation in which you or your family members listed above (or a combination of them) held a controlling interest.

Leaseholder	Nature of Lease
Indicate: Bid, held or offer made	Identity of Lease and Description
Leaseholder	Nature of Lease
Indicate: Bid, held or offer made	Identity of Lease and Description

SCHEDULE F
GOVERNMENT CONTRACTS AND LEASES

Contracts and Offers to Contract **If NONE reportable, check box →** ☐

List all contracts and offers to contract with the state or instrumentality of the state or a municipality during **calendar year 2006** held, bid or offered. Report this information for yourself, your spouse, domestic partner or dependent child who was a sole proprietor, a partnership or professional corporation, a limited liability company; or a corporation in which you or your family members listed above (or a combination of them) held a controlling interest.

Name(s) of Contractor _____ Contracting Agency/Department _____

Indicate: Bid, held or offer made _____ Contract number and description _____

Name(s) of Contractor _____ Contracting Agency/Department _____

Indicate: Bid, held or offer made _____ Contract number and description _____

SCHEDULE G
CLOSE ECONOMIC ASSOCIATIONS

Close Economic Associations **If NONE reportable, check box →** ☐

Municipal Officials and Board & Commission members are **NOT** required to disclose close economic associations.

State Public Officials must disclose close economic associations with a legislator, another state public official, a lobbyist, or a Public Officer if the filer is the governor or the lieutenant governor.

A "close economic association" is a financial relationship that exists between a public official required to disclose a close economic association and some other person or entity, including a relationship where the public official serves as a consultant or advisor to, is a member or representative of, or has a financial interest in an association, partnership, limited liability company, business or corporation.

Name of Filer: _____
Please Print

Position and Department of Filer: _____

Name of Person with whom association exists: _____

Person's Status: (public official, legislator, lobbyist etc.) _____

Description of economic association: _____

_____

_____

CLOSE ECONOMIC ASSOCIATIONS (CONTINUED)

For those with a lobbyist spouse or domestic partner, report the name and address of each employer of the lobbyist and the total monetary value received from each of the lobbyist's employers:

Name & Address of Employer of Lobbyist: _____

Amount of monetary value received: _____

Name & Address of Employer of Lobbyist: _____

Amount of monetary value received: _____

Name & Address of Employer of Lobbyist: _____

Amount of monetary value received: _____

You may attach a listing of the Names & Addresses of the Employers of the Lobbyist along with the total amount of monetary value received from each employer.

You must report changes in the lobbyist's employers within 48 hours of the change.

You must disclose the formation of a new close economic association within 60 days.

CERTIFICATION

I certify under penalty of perjury that the information in this Statement is, to the best of my knowledge, true, correct and complete. A person who makes a false sworn certification which he or she does not believe to be true is guilty of perjury.

_____	_____
SIGNATURE	DATE
_____	_____
Printed Name of Filer	Place

Where to file this Statement

MUNICIPAL OFFICIALS AND CANDIDATES - File Statements with the local City or Borough Clerk in the jurisdiction where you hold or seek office

STATE CANDIDATES: - File **Candidate** Statements with the Division of Elections along with your Declaration of Candidacy

State officials: - File **initial and annual** Statements with the Alaska Public Offices Commission at:

2221 E. Northern Lights #128
Anchorage, AK 99508-4149
Telephone 907/276-4176
FAX 907/276-7018

OR

PO Box 110222
Juneau, AK 99811-0222
240 Main, Rm. 201
Telephone 907/465-4864
FAX 907/465-4832

Mayor's Report

CLJ Consulting
Christie Jamieson, Owner
P.O. Box 1091
Wrangell, AK 99929
bcjamieson@gci.net

September 2012

City of Bethel
Attn: Mayor Dr. Joseph Klejka
P.O. Box 1388
Bethel, AK 99559

Re: Clerk Services

Dear Mayor Dr. Klejka:

The purpose of my letter is to introduce my consulting business, CLJ Consulting, to you and your municipality. I provide municipal clerk training services, such as minute-taking and finalization; conducting effective meetings; basic parliamentary procedures; election coordination and training; preparing agendas and agenda packets; and Open Meetings Act basics, i.e. publication notices, and most importantly, I offer "interim municipal clerk" services.

Some communities around our beautiful state may not need a full-time clerk, but do need an "interim municipal clerk" to perform the core duties of a clerk for a short period of time until a permanent clerk is hired. That is where my expertise and experience comes in.

I recently retired from the City & Borough of Wrangell as Borough Clerk after 32 years of public service at the end of June of 2012. I enjoyed all 15 years as Borough Clerk, with prior positions held in the Finance Department.

I would be more than happy to provide references or any other pertinent detailed information, upon request.

I have attached my business card which lists my contacts and website, should you have any questions.

Best regards,

Christie L. Jamieson

Christie L. Jamieson

CJ Consulting
Christie Jamieson, Owner
P.O. Box 1091
Wrangell, AK 99929
bcjamieson@gci.net

September 2012

City of Bethel
Attn: Mayor Dr. Joseph Klein
P.O. Box 1388
Bethel, AK 99559

Re: Clerk Services

Dear Mayor Dr. Klein:

The purpose of my letter is to introduce my consulting business, CJ Consulting, to you and your municipality. I provide municipal clerk training services, such as minute-taking and finalization; conducting effective meetings; basic parliamentary procedures; election coordination and training; preparing agendas and agenda packets; and Open Meetings Act basics, i.e. publication notices, and most importantly, I offer "interim municipal clerk" services.

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I have attached my business card, which lists my contacts and website, should you have any questions.

Best regards,

Christie L. Jamieson

Manager's Report

CITY OF BETHEL

Post Office Box 1388
Bethel, Alaska 99559
Voice: 907-543-1373
Fax: 907-543-1394

October 16, 2012

From: Lee M. Foley, City Manager

To: Bethel City Council

Info: Lori Strickler, City Clerk

Subj: City Manager's Report

Listed below are some of the action items and activities that I've been working on, and involved in, for the period October 2-16, 2012.

CITY ADMINISTRATION ACTION ITEMS AND ACTIVITIES

Projects:

- **Water & Sewer Cost Analysis & Rate Study** – Met with the CH2MHill Principal Project Manager, Tom Wolf, and the Management Solutions Analyst, Kurt Playstead, along with Public Works Director Chuck Willert and the Utility Maintenance Foreman, Bill Arnold. Items discussed include critical success factors, an overview of the rate development process, and specific issues to be addressed in the study, i.e., Growth, Meters, Service Areas, Instutional Corridor, Cost Analysis, and financial goals. Some financial data has already been collected so this preliminary meeting allowed the key players to interact and visit our water treatment plants. The CH2MHill reps will also be meeting with Finance personnel during this initial face-to-face visit.

- **Tundra Ridge Road** – I am tentatively scheduled to meet with Morgan Merritt from DOT, a BIA rep, and Warren Polk, in Bethel sometime this week to continue discussion of this project.

- **YK Aquatic Center** – Weekly progress meetings are held via teleconference every Friday. During these informal sessions, questions from proposing contractors are discussed, responses are formulated, and any questions the City (Owner) may have are put forth. Additionally, items such as floor plan revisions as previously authorized, energy impacts, etc., are discussed among the principals .Should members of Council

have specific questions concerning any aspect of the project to date, please convey them to me and I will obtain responses.

- **LED Outdoor Lighting** – Slightly more than 40% of the new outdoor LEDs have been installed for the City by BUC. John Sargent has personally directed this project and the support from BUC's Lenny Welch and his crews has been absolutely superb. Fifty (50) of our high pressure sodium street lights will be donated to Kongiganak to assist their village lighting efforts, similar to the arrangement we made with Tuluksak last year.

Miscellaneous:

- **Old Armory Facility** – I gave an interview to KYUK on October 12, 2012, that stated the Council's position, and therefore the Administration's position, with respect to the disposition of the former Armory building. This topic will be discussed at the Special Council meeting on Monday, October 15, 2012. It will be further discussed at the regularly scheduled Council meeting on October 23, 2012, when the Deputy Commissioner for Military & Veteran's Affairs, Mr. McHugh Pierre, will address Council. For the record, Mr. Pierre's stated position is that it is an issue that should be worked out between the City and LKSD, but I pointed out to him that the Guard owns the building, not the City, and that perhaps the Guard and LKSD should work out an acceptable arrangement. Mr. Pierre made it clear to me when we spoke on the phone that the Guard did not have the funds for demolishment. Efforts are underway to arrange for MG Katkus, the Adjutant General and Director, Department of Military & Veteran's Affairs, to meet with Council and LKSD folks to work on an equitable solution to the "Armory Problem."

- **Streets & Roads Upgrade Grant** – This is a long-standing grant that the City has been using to purchase dust control materials and other items to make improvements to our streets and roads. As part of this grant, an Excavator was purchased for joint use between Public Works and the Port. The Excavator arrived in Bethel on the final freight barge of the season and is currently positioned on the City Dock.

Finance:

- **Audit** – The City's annual Financial Audit was essentially completed on Friday, August 12, 2012. An informal out-brief was conducted in which no major issues were identified. Mikunda Cottrell is scheduled to brief Council on the results at a Special Council meeting 30 minutes prior to the regularly scheduled Council meeting on Tuesday, November 27, 2012.

Thank you.

Management Team Reports

Management Team Reports

Clerk's Report

City of Bethel, Alaska

City Clerk's Office

To: City Council
From: Lori Strickler
Subject: Clerk's Report

Upcoming Council Events:
November 27th Regular City Council Meeting

There will be special meeting arranged however dates have not yet been finalized. One meeting will be to discuss the Armory which may take place on the 29th of October. Another meeting will be to discuss the Institutional Corridor which will not be a council meeting but the council will be invited to. And the final meeting will be one to replace the November 13th meeting. The City Clerk's Office will be sure to keep the Council posted as these meetings are arranged.

Projects

The City Clerk attended ICS 300 training October 15th and 16th.

2012 Election Calendar

October 22 Absentee in person voting available in the City Clerk's Office.

Nov. 6 GENERAL ELECTION DAY

Records Retention
The department heads have been informed of the upcoming records retention review. In January the City Clerk's Office will begin modification of the retention schedule so allow for easier retention throughout the departments as well as updates to the schedule. The last records retention rewrite was completed in 2010.

Committee and Commission Training

The City Clerk's Office will be putting on Committee and Commission Training for all of the boards the first three months of 2013. As a reminder, the Clerk's Office is on a bi-annual rotation. In 2012 there were two general trainings held for anyone new to the committees/commissions or that wanted a refresher. In 2013 every committee and commission will get a more personalized training focusing

on their board specifically. Every committee/commission member as well as council member is encouraged to contact my office with any questions regarding board and council procedure.

Committee and Commission Recorder and Ex-Officio Training

The annual training for the committee/commission recorders and ex-officio members will be conducted in January.

City Clerk Out of the Office

The City Clerk will be out of the office beginning October 29th and expect to be out a total of six weeks. During this time, Bing Santamour, the Assistant to the City Clerk will be taking care of the day to day operations of the office. If you have agenda/packet material please provide those items to her via e-mail. Kajena Baty, the Assistant to the Police Chief will be covering the City Council Meetings during the City Clerk's absence. The City Clerk's Office hours will be Monday – Friday 1-5p.

Additional Information

Additional Information

Position Statement on Beverage Taxes and Obesity Prevention

Position

The United States is addressing an obesity epidemic of historical proportion. More than 72 million adults have become obese, tipping the scales too high, and another one third are overweight.[1] Unfortunately, these numbers are spreading to our nation's children where 32 percent are overweight, 16 percent are obese, and 11 percent are extremely obese.[2] The American Heart Association supports a multi-pronged approach to address the nation's obesity epidemic which includes creating policies that improve access and affordability of healthy foods to all people. The AHA also considers the concept of pricing less healthy foods and beverages higher to discourage consumption as a possible policy alternative to bring food and beverage pricing in line with the AHA's Diet and Lifestyle Recommendations and federal dietary guidelines where possible. However, the AHA believes additional research is necessary to determine the impact of these types of sales taxes or excise taxes on consumption rates, and shifts in consumer choice with special consideration for disparate populations. Conceivably, this research could happen in a few states or localities on a pilot basis with comprehensive surveillance to discern real-world impact on consumption trends and dietary behavior. The AHA also believes there should be careful consideration of unforeseen, unintended consequences of these types of policies.

This particular paper focuses on the issue of taxing beverages that contain added sugars and caloric sweeteners. The Association has not yet addressed taxing less healthy foods, as the food environment is more complex and requires greater nuance.

Background

Sugar-sweetened beverages are the largest single source of added sugars in the US diet.[3] Children and adolescents today derive 10% to 15% of their total calories from sugar-sweetened beverages and 100% fruit juice.[4] In 2005, children between the ages of 12 and 19 spent an estimated $159 billion on food, candy and soft drinks.[5] Because youth are more responsive to price change than adults, the potential exists for an even greater impact on consumption by youth.[6]

Indications are that beverage consumption rates are increasing in all ages and as consumption of these drinks increases, there is a concomitant rise in energy intake or "empty calories.[7,8] Soft drink consumption is associated with lower intakes of milk, calcium, and other nutrients and an increased risk of several medical problems including diabetes.[9,10,11,12]

Research demonstrates that beverage consumption varies across age, sex, and race/ethnicity. A 2006 study published in the *Journal of the American Dietetic Association* revealed that in general, males consume more beverages than females, African Americans consume more fruit drinks and Caucasians drink more carbonated soft drinks than other race/ethnic groups.[13] These

results underscore the point that taxation policy should cover all beverages with added sugars to reach diverse segments of the population.

Although there is limited research on the impact of these taxes in the area of food and beverages, there is strong economic and public health evidence on the impact in the areas of tobacco and alcohol excises taxes.[14] For food and beverages, there is a need for much more research elucidating price elasticity and the impact of taxation on consumption trends on beverages, BMI, risk factors for heart disease and stroke and chronic disease incidence. The AHA supports additional research to determine the effects of pricing, taxation, and agricultural subsidies on food and beverage consumption patterns and public health in the United States.

Increasing the tax on sugar-sweetened beverages is a potential source of increased revenue for states that could improve the public health impact of these types of policy interventions by directing those funds for comprehensive public health programs that reduce obesity. If these taxes are put into place, the AHA strongly advocates that state and local governments direct the revenue generated from beverage tax initiatives toward public health and obesity prevention efforts.

The Current Landscape

In the context of the economic downturn and recession, many states are facing significant budgetary shortfalls. As of February 3, 2009, states were addressing a collective budget shortfall of $87.7 billion for fiscal year 2009.[15] This problem is compounded by the projected collective shortfall of $84.3 billion for fiscal year 2010.[5] Policy makers from around the country have begun proposing new taxes on non-diet beverages to help raise revenue to fund these shortfalls and to pay for new obesity prevention programs.

One of the states in which such a tax has been proposed is in New York. There, Governor David Paterson proposed an 18% tax on non-diet sodas and fruit beverages containing less than 70% natural juice. He expected the tax to raise more than $400 million annually and he proposed most of that money be spent on public health measures designed to curb obesity. The tax would not apply to water, milk, coffee, tea or diet sodas.[16] As a leading public health organization focusing on public policies to reduce and end the obesity epidemic the American Heart Association came under significant pressure in New York to endorse the proposal. Although proposal was rescinded in 2009, there is discussion that it might be reintroduced in next year's budget proposal.

In 2006, 19 states imposed excise taxes on sodas in excess of the overall sales tax rate in an attempt to cut down on diabetes and obesity but these taxes have not been in place long enough to discern an effect nor is it clear that comprehensive evaluation is being done. CBO estimates that a tax of 3¢ per 12 oz. drink would raise just under $5 billion per year.[17]

The federal government is considering beverage taxes to help subsidize health care reform. However, there is not a lot of available "real-time" research on the impact of beverage taxes on consumption trends.[18] The Robert Wood Johnson Foundation and others are currently funding research to specifically look at the impact of price on the choices both children and adults make when purchasing beverages. Preliminary data, as yet unpublished, has led researchers to believe that significant price increases, like the one proposed in New York, will have an impact on

consumer behavior, especially with younger and lower income consumers. There is some evidence, when looking at the entire soft drink market that price has a strong effect on consumer behavior.[19] Price elasticities are estimated at around -1.00 which means that a 10% increase in price results in a 10% decrease in demand. There is also some evidence that increasing the price of sugar-based foods by 1% results in a 2-3% reduction in the likelihood that a normal-weight person will become obese.[20]

The Alliance for a Healthier Generation, a partnership between the American Heart Association and the William J. Clinton Foundation, reached a voluntary agreement with the beverage industry that has been in place for three years, removing sodas from all schools and allowing only mid-calorie drinks and diet soda at the high school level. This agreement has led to reduced full-calorie soda offerings in schools and in 2008, the American Beverage Association reported that 58% fewer beverage calories had been shipped to schools across the United States.[21]

Policy efforts in this area of taxation should be comprehensive to reach all segments of the population. While there have been significant advances in schools, schools are not the environment where children get most of their sugar-sweetened beverages.[22] In order to impact overall consumption rates, initiatives will have to address all environments.

In its adult and pediatric nutrition recommendations, the American Heart Association recommends that low calorie beverages like water, diet soft drinks and fat free or low fat milk are better choices than full calorie soft drinks and Americans should limit the amount of added sugars in the foods they eat.[23,24] The 2005 Dietary Guidelines for Americans also recommends limiting added sugars in the diet.[25]

Conclusion

The American Heart Association supports additional research to determine the efficacy of taxation policy on consumption trends, public health, the alternative choices consumers would make if they move away from sugar-sweetened beverages, the impact of these policies on disparate populations, and whether there are any unforeseen unintended consequences. The AHA also feels that robust evaluation should be part of any tax measures that are passed. Additionally, the AHA will continue to be a resource to policy makers with regard to nutrition science and the use of tax revenues to fund under-funded public health programs. Finally, the AHA advocates for broader nutrition policy efforts that make healthy foods more affordable and accessible to all consumers and bring food pricing and subsidies in line with federal dietary guidelines and AHA nutrition recommendations.

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American Heart Association | American Stroke Association

Decreasing Sugar-Sweetened Beverage Consumption

Policy Approaches to Address Obesity

OVERVIEW

America is in the midst of an obesity epidemic, with levels among adults at an all-time high. Sadly, children are not untouched by this frightening new reality; 32 percent are overweight, 17 percent are obese, and 12 percent are extremely obese.[1]

The American Heart Association (AHA) supports a multipronged approach to address this problem. It includes creating and implementing policies designed to improve access to affordable, nutritious foods and beverages, thereby making it easier for Americans to choose healthy foods consistent with the Dietary Guidelines for Americans. The AHA also supports examining whether policies such as beverage taxes, eliminating sugary beverages from the Supplemental Nutrition Assistance Program, and adjusting cooperative marketing agreements to address beverage placement in supermarkets can curb the consumption of sugary drinks and improve the health of Americans of all ages.

THE CURRENT LANDSCAPE

Emerging data suggests that high intake of added sugars can exacerbate existing health problems and contribute to essential nutrient shortfalls. For example, diets high in added sugars are often low in fiber, which can undercut weight loss efforts.[2]

Soft drinks and other sugar-sweetened beverages have been identified as the primary source of these added sugars in Americans' diets[3], and their increased consumption has been associated with rising obesity rates.[4,5] Even children have a high intake of added sugars. They get 10-15% of their total daily calories from sugar-sweetened beverages and 100% fruit juices.[6]

In 2006, the Alliance for a Healthier Generation, a joint initiative of the AHA and the Clinton Foundation, joined forces with leaders of the beverage industry to remove full-calorie soft drinks in schools across the country, and replaced them with smaller, lower-calorie options.[7] The initiative was successful resulting in 88% fewer beverage calories shipped to schools across the U.S. However, children get many of their beverage calories outside of schools.

- In 2005, children ages 12-19 spent an estimated $159 billion on food, candy and soft drinks.[8] Although full-calorie beverage consumption is on the decline, beverage consumption as a whole is increasing, especially with the mid-calorie drinks like sports drinks, teas, and energy drinks.[9] Children are getting a lot of "empty calories," replacing healthier options like low- or fat-free milk. and water. Compounding this issue is the fact that energy drinks often do not qualify as beverages, but rather as dietary supplements, which gives the FDA less regulatory control over them.[9]
- A 2010 survey among high school students revealed that while milk, 100% fruit juice and water were the most common beverages consumed in the week prior to the survey, most kids drank one or more additional sugar-sweetened beverage each day: either regular soda (25%), a serving of a sports drink (16%) or another sugar-sweetened drink (17%).[10]

THE POTENTIAL FOR POSITIVE CHANGE

Recently, a comprehensive, systematic review of 160 studies looked at the effect of price on food demand and consumption behavior in the United States. Food eaten away from home, soft drinks, juice and meats were the most responsive to price changes.[11]

- One study showed that a rise in price in away-from-home foods and soda was associated with lower caloric intake, healthier weight, and decreased risk for diabetes.[12]
- Other studies suggest that a 10% price increase might decrease consumption of these foods and beverages by about 8-10%.[10]
- Vulnerable populations, especially low-income and the less educated, as well as children and adolescents, are especially price-sensitive.[13,14,15] And they also represent population groups that have the greatest health disparities and might benefit most from lower consumption of sugary beverages.[16]

- Taxes have been used as a way to discourage the use of unhealthy products, such as alcohol or tobacco, and there is strong economic and public health evidence of their positive impact.[17]
- Medical costs of obesity-related conditions are expected to cost $166.2 billion in 2012. Funding for obesity prevention programs could be obtained from a small tax on sugar-sweetened beverages. If a 20 ounce bottle costs $1.50, and carries a one-cent tax per ounce, the total cost per bottle would be $1.70, resulting in **$13.2 billion** in total tax revenue in 2012.[18]

THE AHA ADVOCATES

The U.S. is in the throes of an obesity epidemic. Reducing the consumption of excess sugars from sugary beverages is an important way to improve the health of Americans. The AHA advocates for:

- Robust nutrition standards in schools for meals and competitive foods that promote healthier offerings, including beverages that are higher in nutrients and without added sugars limiting empty calories throughout the school environment.
- Comprehensive procurement standards for foods and beverages purchased by employers and governments offered in the workplace, meetings, or conferences.
- Determining the impact of beverage sales taxes or excise taxes on consumption rates and shifts in consumer choice with special attention on vulnerable populations by supporting tax initiatives in some states and localities. Key criteria for AHA support are: (1) at least a portion of the money is dedicated for heart disease and stroke prevention and/or obesity prevention; (2) the tax is structured so as to result in an increase in price for sugar-sweetened beverages (e.g., imposed at the time of sale as opposed to the manufacturer that can spread the cost of the tax among all products);(3) the amount of tax is anticipated to be sufficient to result in a reduction in consumption of sugar-sweetened beverages (at least 1 cent/oz); (4) there are funds dedicated for evaluation with guidance that ensure rigorous evaluation including health outcome; (5) there is a standard definition of "sugar-sweetened beverage," and; (6) there is no sunset.
- Working with major supermarket chains to address the cooperative marketing agreements with beverage companies to prioritize the prime placement of healthier beverages in stores.
- Exploring with some pilot states and/or municipalities the impact of limiting the purchase of full-calorie soda in the Supplemental Nutrition Assistance Program.
- Eliminating the marketing of unhealthy beverages to children.

CONCLUSION

The American Heart Association advocates additional research to determine how pricing, taxation, and agricultural subsidies on food and beverage consumption patterns could improve the health of Americans, particularly as it relates to the obesity epidemic and related chronic diseases, such as cardiovascular disease, diabetes and cancer.

We recommend that low- and no calorie beverages like water, diet soft drinks, and fat- free or low-fat milk are better choices than full- calorie soft drinks[19,20] and that Americans should try to limit the amount of added sugars in all the foods they eat.

The AHA further advocates that state and local governments that generate revenue from beverage tax initiatives direct these funds toward public health and obesity education and prevention efforts. Thorough evaluation efforts should also be implemented to determine the efficacy of such programs.

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AHA/HPFS/05/2012

Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis

David S Ludwig, Karen E Peterson, Steven L Gortmaker

Summary

Background The rising prevalence of obesity in children has been linked in part to the consumption of sugar-sweetened drinks. Our aim was to examine this relation.

Methods We enrolled 548 ethnically diverse schoolchildren (age 11·7 years, SD 0·8) from public schools in four Massachusetts communities, and studied them prospectively for 19 months from October, 1995, to May, 1997. We examined the association between baseline and change in consumption of sugar-sweetened drinks (the independent variables), and difference in measures of obesity, with linear and logistic regression analyses adjusted for potentially confounding variables and clustering of results within schools.

Findings For each additional serving of sugar-sweetened drink consumed, both body mass index (BMI) (mean 0·24 kg/m²; 95% CI 0·10–0·39; p=0·03) and frequency of obesity (odds ratio 1·60; 95% CI 1·14–2·24; p=0·02) increased after adjustment for anthropometric, demographic, dietary, and lifestyle variables. Baseline consumption of sugar-sweetened drinks was also independently associated with change in BMI (mean 0·18 kg/m² for each daily serving; 95% CI 0·09–0·27; p=0·02).

Interpretation Consumption of sugar-sweetened drinks is associated with obesity in children.

Lancet 2001; **357:** 505–08
See commentary page 505

Introduction

The prevalence of obesity among children in USA increased by 100% between 1980 and 1994.[1] Recent national estimates indicate that 24% and 11% of children are above the 85th and 95th reference percentiles of body mass index (BMI), for age and sex, respectively. Various environmental and social factors relating to diet and physical activity have been identified that could contribute to obesity.[2] One such factor, which has received little attention, is the consumption of sugar-sweetened drinks.

According to data from the US Department of Agriculture (USDA), per capita soft-drink consumption has increased by almost 500% over the past 50 years.[3] From 1989–91 to 1994–95, soft-drink intake rose from 195 to 275 mL in the general population, and from 345 to 570 mL among adolescent boys.[4] Half of all Americans and most adolescents (65% girls and 74% boys) consume soft drinks daily,[5] most of which are sugar-sweetened, rather than artificially sweetened.[6] Currently, soft drinks constitute the leading source of added sugars in the diet,[7,8] amounting to 36·2 g daily for adolescent girls and 57·7 g for boys.[7] These figures approach or exceed the daily limits for total added sugar consumption recommended by the USDA. Among children of school age, total energy intake is positively associated with soft-drink consumption, ranging from an adjusted mean of 7650 kJ daily for non-consumers to 8435 kJ for those drinking an average of 265 mL or more every day.[6]

Although this increase in soft-drink consumption coincides with secular increases in obesity prevalence in children, the long-term effects of sugar-sweetened drink consumption on measures of body weight need to be prospectively examined. We aimed to determine the association between change in sugar-sweetened drink consumption and change in BMI, and incidence of obesity among school-age children, over 2 academic years.

Methods

Patients

Data for our study were obtained as part of the Planet Health intervention and evaluation project, which took place in schools in four communities in the Boston, Massachusetts, metropolitan area between October, 1995, and May, 1997. We enrolled children from five randomly assigned control schools that did not take part in the lifestyle intervention programme designed to reduce obesity prevalence.[9] The median household income of zip-code areas where the control schools were located, averaged US$34 200, according to 1990 census data. This median is lower than that for all households in Massachusetts in the 1990 census ($41 000), but similar to the USA figure ($33 952).[10] After excluding individuals who changed schools at baseline, were in special education classes, were in grades other than sixth (11 years) or seventh (12 years) or did not complete the English-language version of the questionnaire, a total of 780 people (64·5% of those eligible) completed the baseline evaluation in October, 1995. Follow-up data were obtained in May, 1997 (19 months later, SD 0·14), for 84% (654) of the baseline sample, indicating a drop-out rate of 18% (69) for girls and 14% (57) for boys. The main reason for lack of follow-up anthropometric data was school transfer (half those not followed-up) and school absence (a quarter). Complete data on all variables were available for 571 children. We excluded an additional 23 children because of implausible daily energy intakes (≤2090 kJ or ≥29 260 kJ), leaving a cohort of 548 individuals for analysis. At baseline, characteristics of the cohort were: mean age 11·7 years (SD 0·8); 48% (263) female, 64% (351) white, 15% (82) Hispanic, 14% (77) Afro-American, 8% (44) Asian, and 8% (44) American Indian or other; and 38% (208) reported exercise to lose weight. Further details of the school recruitment process, the sampling plan, and a comparison of those followed-up and not are described elsewhere.[9] The study was approved by the Committee on Human Subjects at the Harvard School of Public Health. Informed consent was obtained from all individuals, as previously described.[9]

Protocol

In this prospective observational analysis, the primary hypotheses were that baseline, and change in, consumption of sugar-sweetened drinks could directly predict a rise or fall in BMI over 2 academic years. Demonstrating that change in an independent variable predicts change in a dependent variable could provide stronger evidence for causality than

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predictions involving the independent variable measured at just one point in time—eg, baseline.[11] Obesity incidence was the dependent variable in secondary analyses.

We obtained anthropometric data and student surveys at the beginning of grades six and seven in October, 1995, and follow-up measurements about 19 months later, in May, 1997. Height without shoes was measured to the nearest 0·1 cm using a Shorr stadiometer (Irwin Shorr, Olney, MD, USA) and weight in light clothes was measured to the nearest 0·1 kg on a portable electronic scale (Seca Model 770, Seca Corporation, Hanover, MD, USA) calibrated with the Seca standard weights step-up test. BMI was calculated by dividing weight by height, and was expressed as kg/m². We defined obese students with a composite indicator,[12] on the basis of both BMI and triceps-skinfold thickness greater than or equal to the 85th percentile of age-specific and sex-specific reference data.[13] Triceps-skinfold thickness was measured to the nearest 0·2 mm by trained project staff, with calibrated Holtain calipers (Holtain Ltd, Crymych, Pembrokeshire, UK),[11] but without rigorous control of the children's clothing. To improve precision, more than one measurement was done; if two measurements differed by more than 2 mm, a third was taken, and the average was used.

Sexual maturity ratings are recommended to interpret and control for differences among individuals in the maturational tempo not indicated in reference growth curves for BMI and triceps-skinfold thickness.[15] Use of self-reported or clinical sexual maturity rating assessment in either boys or girls was not allowed by school systems. We therefore obtained baseline self-reports of menarcheal status in girls.

Measures of dietary intake, physical activity, and television viewing were obtained with a student food and activity questionnaire. Students completed this questionnaire independently, in class, and under the supervision of teachers who participated in a 1-h training session before administration. The youth food-frequency questionnaire (YFFQ), adapted and validated for use in ethnically and socioeconomically diverse populations,[16,17] was used to assess average intake of drinks, percentage energy intake from dietary fat, and total energy intake. Sugar-sweetened drink consumption was calculated from responses to the YFFQ that inquired as to how often in the past 30 days three items were consumed: soda (never or less than one can per month, one to three per month, one per week, two to six per week, one per day, ≥two per day); Hawaiian punch, lemonade, Koolaid, or other sweetened fruit drink (never or less than one glass per month, one to three per month, one per week, two to four per week, five to six per week, one per day, ≥two per day); and iced tea, not artificially sweetened (never or less than one glass per month, one to three per month, one to four per week, ≥five per week). These three items were added to measure the total daily intake of sugar-sweetened beverage. One question, concerning diet soda (categorised as per soda, above), was used to establish the amount of diet-soda intake every day. Fruit juice (100%) consumption was calculated from responses to two questions about orange, apple, and other fruit juices (quantified as never or less than one glass per month, one to three per month, one per week, two to six per week, one per day, ≥2 per day). The category two or more cans per day was coded as two cans per day; the category five or more glasses per week was coded as five glasses per week. For the other drink items, ranges were coded to the midpoint.

Physical activity was assessed with the youth activity questionnaire (YAQ), which consists of 16 items that together estimate the amount of hours per day spent doing moderate and vigorous activities (≥3·5 mets)[18] over the past month. Walking was excluded because of the low validity found for this activity.[19] The YAQ is based on a 14-item physical activity questionnaire shown to have good reproducibility and validity in adults,[20,21] and children of highschool age.[19] In a validation study among participants in Planet Health, with repeat 24-h recalls one month apart, the YAQ correlated (deattenuated) with the average of these two 24-h recalls (r=0·80, with equivalent means).[9] (Deattenuation adjusts for random error seen in the measures, providing a more accurate assessment of the relation between variables of interest.[22]) Although repeat 24-h recalls do not constitute a gold standard of dietary intake, the results provide validity evidence for YAQ.[22]

Time spent watching television and videos was measured with the 11-item television and video measure (TVM).[9] Questions were asked about hours of television typically viewed during every day of the week, as well as use of video cassette recorders, and video and computer games. Items were appropriately weighted and summed to obtain a total viewing hour-per-day estimate. In the validation sample (n=53), we found a deattenuated[22] correlation of television viewing via the TVM and the 24-h recall of r=0·54, with equivalent means.

Age was calculated on the basis of birth date and date of anthropometric examinations; in a few cases of missing birth date, self-reported age from the FAS survey was used. Sex was established at the time of examination, apart from a few missing cases for whom it was obtained from school lists. Ethnic origin was established on the basis of responses of students to a multiple choice question. Participants indicating black on the questionnaire were classified as Afro-American. The self-report questions about exercising to lose weight were adapted from national surveillance indicators.[19,23]

Statistical analysis

Because students are clustered within schools, we used SUDAAN software (version 1996) for analysis of correlated data to estimate regressions taking into account the clustered sample. SUDAAN estimates use an implicit Taylor linearisation method. For dichotomous outcomes (obesity incidence), the generalised estimating equation (GEE) method was used[24] with software written for use with SAS data sets. Both estimation approaches take into account the intraclass correlation of responses within schools.

The analyses contained terms for baseline consumption of sugar-sweetened drinks and change in consumption (follow-up minus baseline). After examination of relations between independent variables to ensure lack of multicollinearity, we sequentially adjusted for sets of variables that might confound the associations between intake of sugar-sweetened drinks and measures of obesity. Model 1 included baseline anthropometrics (BMI and triceps-skinfold thickness); demographics (age, sex, ethnicity[13,15]); and indicator variables for schools (the largest as the omitted category). Model 2 included the variables in model 1 plus other factors that might affect body weight, including diet (percent energy from fat at baseline, energy-adjusted fruit-juice intake at baseline, and change in these variables from baseline to follow-up); physical activity (whether exercising to lose weight,[9] physical activity ≥3·5 met, change in physical activity ≥3·5 met, number of physical education classes per week); and time spent watching television and videos,[9] and change in time spent watching television and videos. In model 3, we controlled further for total energy intake (kJ daily) by replacing the sugar-sweetened drink variables with energy-adjusted sugar-

sweetened drink variables (baseline and change from baseline to follow-up). Although total energy intake might be a causal factor relating obesity to sugar-sweetened drink intake, this variable could also confound our associations if beverage consumption is a marker for increased consumption of other foods. Therefore, we included this adjustment in our last model. All p values are two-tailed.

Results

Table 1 shows baseline and follow-up anthropometric and dietary data. Intake of sugar-sweetened drinks increased from baseline to follow-up: only 38 (7%) children showed no change in sugar-sweetened drink intake whereas 57% (312) showed increased intake, with a quarter drinking more than one extra serving daily. BMI also increased. The baseline prevalence of obesity was just over a quarter, and the cumulative incidence of new cases over the 19 months was 9·3%. Children reported moderate to vigorous activity for roughly 1–2 h per day. Table 2 shows the associations between sugar-sweetened beverage consumption and BMI at follow-up, controlling for baseline BMI, with further adjustment for potentially confounding variables in three different models. In the fully adjusted model 3, BMI was increased for each serving per day at baseline, and further increased for every additional serving. Table 3 shows the association between sugar-sweetened drink consumption and obesity incidence, controlling for potentially confounding variables. In the fully adjusted model 3, the odds of becoming obese increased significantly for each additional daily serving of sugar-sweetened drink. There was no independent, significant association between baseline consumption and obesity incidence, though the direction of the association was the same as that for change in sugar-sweetened drink consumption.

We also estimated fully adjusted regressions, replacing the sugar-sweetened drink variables with measures of diet-soda consumption and change in diet-soda consumption (model 3 in tables 2 and 3). There were no significant relations with BMI (p=0·10 for both baseline consumption and change in consumption), and the coefficient estimates were negative. Baseline diet-soda intake was not related to obesity incidence (p=0·69) but change in diet-soda intake was negatively associated with incidence (odds ratio 0·44, p=0·03).

To control for the potential effect of sexual maturity, we added self-reported menarcheal status to the regressions. When this adjustment was made to model 3 in table 2, the coefficients for baseline consumption and change in consumption were unchanged (0·18, p=0·02; and 0·24, p=0·03, respectively).

	Baseline	Follow-up
Anthropometric		
Body mass index (kg/m²)	20·73 (3·99)	22·23 (4·38)
Triceps skinfolds (mm)	15·87 (6·74)	17·38 (7·31)
Number obese*	150 (27·4%)	152 (27·7%)
Obesity incidence†	..	37 (9·3%)
Dietary‡		
Sugar-sweetened drinks (daily servings)	1·22 (1·10)	1·44 (1·09)‡
Fruit juice (daily servings)	1·28 (1·17)	1·08 (1·04)
Total energy intake (kJ)	8950 (4500)	9610 (4715)
Energy from fat	31·3% (5·4%)	30·1% (5·1%)
Change in sugar-sweetened drink consumption (daily servings)	..	0·22 (1·14)
Change in juice consumption (daily servings)	..	−0·20 (1·21)
Change in energy intake from fat	..	−1·8% (5·6%)
Physical activity and inactivity		
Daily television viewing (h)	3·32 (2·10)	3·11 (2·08)
Daily reported h of activity (≥3·5 met)	1·34 (1·09)	1·28 (1·03)
Weekly number of physical education lessons	2·00 (1·20)	2·09 (1·03)
Change in television viewing	..	−0·21 (2·07)
Change in h of activity	..	−0·06 (0·97)

*BMI and triceps-skinfold measurements ≥85th reference percentiles. †Obesity incidence = number of the 398 individuals not obese at baseline, who became obese at follow-up. ‡p<0·001. All values are mean (SD) unless otherwise indicated.

Table 1: **Baseline (October, 1995) and follow-up (May, 1997) anthropometric, dietary, and activity data (n=548)**

	Baseline consumption*		Change in consumption†	
	Mean (95% CI)	p	Mean (95% CI)	p
Model 1 Baseline anthropometrics, demographics	0·12 (0·03–0·21)	0·06	0·20 (0·11–0·30)	0·01
Model 2 Plus dietary variables, physical activity, television viewing	0·13 (0·05–0·21)	0·03	0·20 (0·09–0·30)	0·02
Model 3 Plus total energy intake	0·18 (0·09–0·27)	0·02	0·24 (0·10–0·39)	0·03

*BMI (kg/m²) per daily serving at baseline. †BMI (kg/m²) per one daily serving increase.

Table 2: **Relation between intake of sugar-sweetened drinks (baseline consumption and change in consumption from baseline to follow-up) and BMI in May, 1997, controlling for baseline BMI (October, 1995) and other covariates, among the 548 children**

Discussion

Excessive bodyweight probably now constitutes the most common paediatric medical problem in USA. Although the cause of this apparent obesity epidemic is likely to be multifactorial, our findings suggest that sugar-sweetened drink consumption could be an important contributory factor. The odds ratio of becoming obese among children increased 1·6 times for each additional can or glass of sugar-sweetened drink that they consumed every day. By contrast, increased diet-soda consumption was negatively associated with obesity incidence. Our prospective analysis also indicates that both baseline sugar-sweetened drink consumption and change in consumption independently predict change in BMI.

There are several limitations to the interpretation of our findings. First, our study was observational in nature and cannot prove causality. Although we attempted to control for the effects of the major identified predictors of obesity in childhood, sugar-sweetened drink consumption could be a marker for unrecognised factors that affect body weight. Furthermore, inaccuracy in measurement of factors included in our models, such as menarcheal status by self-

	Baseline consumption*		Change in consumption†	
	Mean (95% CI)	p	Mean (95% CI)	p
Model 1 Baseline anthropometrics, demographics	1·41 (0·62–3·25)	0·31	1·39 (0·99–1·95)	0·05
Model 2 Plus dietary variables, physical activity, television viewing	1·46 (0·57–3·77)	0·33	1·44 (1·22–1·70)	0·004
Model 3 Plus total energy intake	1·48 (0·63–3·47)	0·27	1·60 (1·14–2·24)	0·02

*Odds ratio per daily serving at baseline. †Odds ratio per one daily serving increase. ‡Incidence rate per 19-month follow up.

Table 3: **Odds ratio for relation between intake of sugar-sweetened drinks (baseline consumption and change in consumption from baseline to follow-up) and incidence of obesity‡ from baseline to follow-up in 398 children classified as non-obese at baseline**

report or total energy consumption, might mask residual confounding. The possibility of confounding is especially strong for the analyses for diet soda, since these drinks could be preferred by individuals trying to lose weight. Second, for logistical reasons, we used indirect measures of obesity (BMI and a composite indicator of BMI and triceps-skinfold thickness). Although these measures are in widespread use, and provide a good estimate of adiposity in children,[25] we cannot fully control for changes in body composition over time, resulting, for example, from puberty or fitness training. Third, the study has limited statistical power, with 548 children (the entire cohort) in analyses of BMI, but only 37 in estimates of incident obesity. By contrast with these limitations, random error in the measurement of drink consumption, and inaccuracy in the estimation of adiposity by BMI, could lead to underestimation of actual effects.

Why should consumption of sugar-sweetened drinks promote obesity any more than other categories of food? In the short-term, most individuals effectively compensate for excess energy consumption by eating less at subsequent meals.[26] In the longterm, changes in bodyweight elicit physiological adaptations, involving hunger and rate of metabolism, that tend to restore baseline bodyweight.[27] Indeed, there is no clear evidence that consumption of sugar per se affects food intake in a unique manner or causes obesity.[28] However, a meta-analysis of studies done over 25 years suggests that compensation at subsequent meals for energy consumed in the form of a liquid could be less complete than for energy consumed in the form of solid food.[29] For example, De Castro[30] examined 7-day food diaries of 323 adults and found that energy from drinks added to total energy intake and did not displace energy ingested in other forms. Mattes[29] showed that total energy consumption among 16 patients was greater on the day that an energy-containing drink was given at lunch than on the preceding day. Moreover, Tordoff and Alleva[31] found that total energy intake and body weight increased in people given 2215 kJ of sugar-sweetened drink daily for 3 weeks, but decreased when they were given artificially sweetened carbonated drinks for the same period of time, relative to when no such drinks were given. Finally, school children drinking an average of 265 mL or more of soft drinks daily consumed almost 835 kJ more total energy every day than those drinking no soft drinks.[6] Thus, the results of our study are consistent with a plausible physiological mechanism, that consumption of sugar-sweetened drinks could lead to obesity because of imprecise and incomplete compensation for energy consumed in liquid form.

Contributors

David Ludwig and Steven Gortmaker designed the study, interpreted the data, and wrote the initial draft of the manuscript. Karen Peterson was co-principal investigator of Planet Health, and assisted in data analysis and manuscript preparation.

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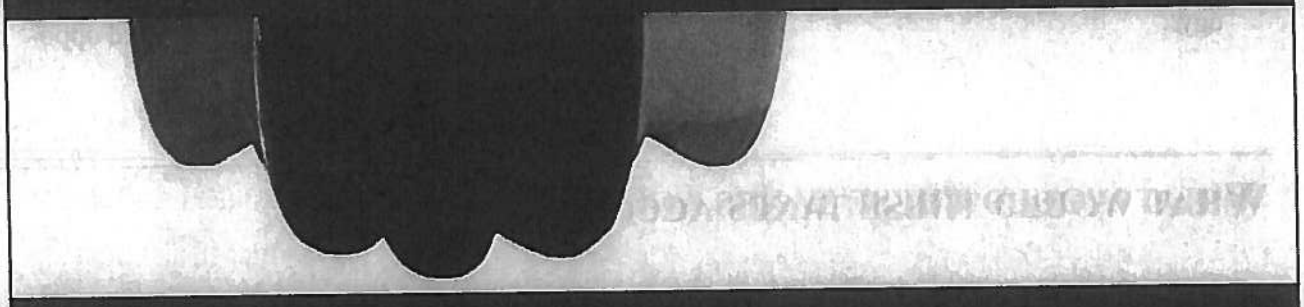
Soft Drink Taxes

Opportunities for Public Policy



RUDD REPORT

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RUDD CENTER FOR FOOD POLICY & OBESITY Yale University

SOFT DRINK TAXES

WHY CONSIDER THEM?

Sugar-sweetened beverages with little or no nutrition are staples of today's American diet. These beverages are inexpensive, in abundant supply, and appeal to our taste for sugar. They are heavily marketed, especially to children, often using celebrities, sports stars, and cartoon characters. More than for any category of foods, rigorous scientific studies have shown that consumption of soft drinks is associated with poor diet, increasing rates of obesity, and risk for diabetes. These links are strong for children.

Chronic diseases related to poor diet cost the country billions of health care dollars each year and are complex problems which must be addressed with multi-faceted strategies. Taxing certain classes of products to reduce consumption has been proposed as one such strategy.

Policy makers across the country who are concerned about nutrition are considering the implementation of soft drink taxes to complement other public health initiatives.

As of 2007, 40 states imposed small sales taxes on soft drinks and/or snacks. The rates are highest for soft drinks and for items purchased in vending machines.[1]

This Rudd Report gives policy makers and interested citizens key information to determine whether such taxes are a viable alternative for their constituents and communities.

It provides:

- a summary of research which addresses concerns of policy makers and citizens;
- policy recommendations;
- arguments used by proponents and opponents of taxes.

WHAT WOULD THESE TAXES ACCOMPLISH?

Taxes on beverages that contribute to poor nutrition and obesity can:

- raise considerable funds to be earmarked for nutrition initiatives such as subsidies of healthy foods or programs in schools;
- raise the relative price of unhealthy beverages thereby discouraging their consumption;
- decrease sales of those beverages, and influence demand for healthier alternatives, which may encourage beverage manufacturers to reformulate their products;
- convey a message that government and policy makers are concerned about nutrition and the public's health.

REVENUE POTENTIAL

- A very small national tax, 1 cent per 12-ounce soft drink, would generate at least $1.5 billion annually.[2] Placing this in context, this is triple the amount the nation's largest funder of work on childhood obesity is spending in five years.
- A proposed sales tax of 18% on soft drinks in New York State is projected to bring in $400 million in the first year and close to $540 million thereafter.[3]

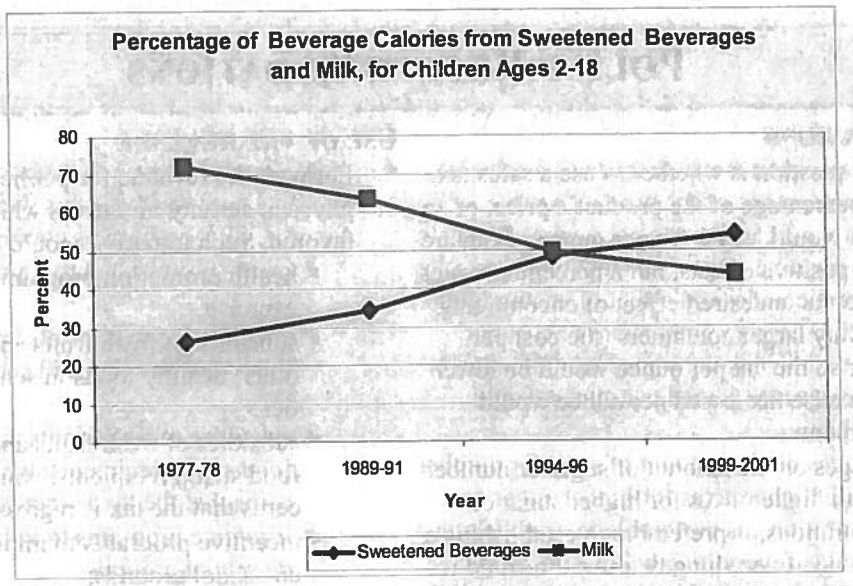
ISSUES CONCERNING SOFT DRINK TAXES AND SYNOPSES OF SCIENTIFIC RESEARCH

ISSUE: CONSUMPTION

A substantial increase has occurred in the consumption of soft drinks since the 1970s.

FINDINGS

- The percentage of beverage calories from sweetened beverages consumed by 2-18 year olds has increased, while the percentage from milk has decreased. In the mid-1990's the intake of sugared beverages began surpassing that of milk.[4]
- U.S. per capita daily consumption of calories from sugar-sweetened beverages rose by nearly 30% in the past decade alone.[5] Further, traditional carbonated drinks are losing market share, while drinks like sports drinks, energy drinks, and sweetened waters and teas are showing significant growth in the marketplace.[6]
- For children, the odds of becoming obese increase 1.6 times for every extra can or glass of sugar-sweetened beverage consumed per day.[7]
- Sugar-sweetened beverage consumption is highest among groups that are at greatest risk of obesity and type 2 diabetes.[8]
- Systematic reviews of evidence conclude that greater consumption of sugar-sweetened beverages is associated with increased calorie intake, weight gain, and obesity.[9] Papers not showing this effect are generally funded by the beverage or sugar industries.
- Research suggests that people compensate less well for calories that come in beverages compared to calories in solid food; hence the large increase in calories from beverages is a matter of great concern.[10]



ISSUE: PRICE

Price changes affect purchases, consumption, and weight.

FINDINGS

EFFECT ON WEIGHT

- Even small taxes on soft drinks are associated with modest reductions in weight.[11]
- A review of 9 studies concludes that non-trivial pricing strategies may have an effect on weight, particularly among youth, low-income populations, and those who are overweight.[12]

EFFECT ON PURCHASE AND CONSUMPTION

- Based on estimates of the responsiveness of demand for soft drinks to changes in price,[13] an 18% tax could result in a 14-18% reduction in consumption.
- Price interventions can be effective in curtailing at-home soft drink consumption, and promoting milk consumption.[14]
- Experiments show that decreasing the cost of healthy foods relative to that of less-healthy foods, is effective in promoting the purchase of healthy items.[15]

ISSUE: TAXING

Taxing alcohol and cigarettes has proven to be highly successful in reducing consumption.

FINDINGS

- Numerous economic studies conclude that every 10% increase in the real price of cigarettes results in a:
  - 3 to 5% reduction in overall consumption;
  - 3.5% reduction among young adult smokers;
  - 6 to 7% reduction among children.[16]
- A 2009 systematic review of 112 studies of alcohol taxes or price effects establishes that increasing prices of alcohol is an effective means to reduce drinking.[17]

ISSUE: PUBLIC SUPPORT

Will the public support soft drink taxes?

FINDINGS

- Taxes whose revenue is clearly earmarked to promote the health of key groups (such as children) are most likely to receive public support.[18]
- Public support varies significantly depending on how the poll questions are phrased.
  - A December 2008 poll of New Yorkers found lower support (31%) for an "obesity" or "fat" tax.[19]
  - In contrast, another December 2008 poll found that 52% of New Yorkers supported a "soft drink" tax. That number rose to 72% when respondents were informed that the revenue raised would be earmarked for obesity prevention among children and adults.[20]
- Support has increased with time: a 2003 national survey found that 41% percent supported a special tax on "junk food."[21]

POLICY RECOMMENDATIONS

TAX CONSIDERATIONS

- An important question is whether to use a sales tax, most often a percentage of the product's price, or an excise tax that would levy a fee per ounce. Both are likely to have positive effects, but a percentage sales tax might have the undesired effect of encouraging consumers to buy larger containers (the cost per ounce is lower so the tax per ounce would be lower as well). An excise tax levied per ounce would avoid this problem.
- Taxing beverages on the amount of sugar or number of calories, with higher taxes for higher sugar or calorie concentrations, is preferable to establishing a threshold for a tax (everything below a threshold is not taxed) to avoid reformulation of products to fall just below the threshold. This would, however, make a tax more complicated.

PUBLIC HEALTH MESSAGE

- Make the public health message explicit to increase public support for a tax: the purpose is to fund nutrition programs and obesity prevention, and to reduce consumption of unhealthy products.
- Note that the tax is not just directed at obesity. Poor nutrition affects the health of everyone, overweight or not. In addition, children can develop habits and brand loyalties well in advance of becoming overweight.

USE OF THE REVENUE

- Earmark the revenue for public health nutrition and physical activity initiatives which will be publicly favored. Such initiatives could include:
  - health promotion programs on nutrition and exercise;
  - subsidies of fresh fruits and vegetables and other healthy foods in schools and communities;
  - subsidies of fresh fruits and vegetables for food stamp recipients, which can offset concerns that the tax is regressive;
  - incentive programs to improve all foods sold on school grounds;
  - improvements to the built environment for increased physical activity;
  - incentives to attract supermarkets to low income neighborhoods;
  - social marketing campaigns to counteract the marketing strategies used by food industries to advertise soft drinks and snacks to children.

OTHER CONSIDERATIONS:

- Include soda, sports drinks, sweetened teas, vitamin waters, and fruit drinks in the soft drink category.
- Create "disfavored" tax statuses for soft drinks, making them higher than general food taxes.

ARGUMENTS FOR AND AGAINST SNACK AND SOFT DRINK TAXES

OPPONENTS SAY:	PROPONENTS SAY:
Soft drink taxes are regressive. They will disproportionately hurt the poor and minorities who spend a larger proportion of their income on food.	*Soft drink taxes have the potential to be most beneficial to low-income people, who:* ▪ may currently consume more soft drinks; ▪ may be more sensitive to higher prices and therefore stand to benefit most from reducing consumption. This is especially true if the revenues are used for programs that will benefit the poor, or for subsidies on healthier foods which can offset concerns that the tax is regressive. While everyone must eat, sugared beverages are not a necessary part of the diet and generally deliver many calories with little or no nutrition.
The government should stay out of private behavior. It should not try to regulate what people eat or drink.	*The government is already deeply involved in what we eat, from farm subsidies to setting nutritional standards for school meals.* Historically, major government interventions have been successful in improving and protecting the public's health. Examples include smoking restrictions and tobacco taxes, mandated seat belt usage, fluoridated water, and vaccinations.
Soft drink taxes can't be compared to cigarette and alcohol taxes. The use of tobacco and alcohol can have adverse consequences for non-users (for example, second hand smoke, and drunk driving accidents, called "negative externalities"). This is not true for soft drink consumption.	*Obesity also has negative externalities which affect us all.* Among them are significant overall health care costs, including higher medical, disability, and insurance premium costs. For example, obesity-related medical expenditures were estimated in 2002 to be $92 billion, half of which were paid for with taxpayer dollars through Medicaid and Medicare.[22]
People who consume too many soft drinks know they risk becoming overweight. Everyone else shouldn't have to bear the burden of their bad decisions.	*Consumers, especially young ones, may not know the risks involved in over-consumption of soft drinks or calories. For example:* ▪ People may not be aware that a 20-ounce bottle of Coca Cola has more than 15 teaspoons of sugar and 240 calories. ▪ Most people cannot estimate the number of calories in a fast food meal. Even experienced nutritionists underestimate the numbers. ▪ Overweight and obese children are more likely to become obese adults and suffer from related chronic diseases. The public may also not be aware that in 2006 manufacturers spent about $1.62 billion to market soft drinks, snacks, and other unhealthy foods, just to children and adolescents and just in the U.S. Approximately $870 million of that was spent on advertising to children under 12.[23]
These taxes will jeopardize jobs.	*Soft drink taxes could shift consumer demand,* forcing the industry to reformulate its products to be healthier, rather than to downsize and cut jobs. Tobacco taxes did not cause long-term job loss.

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Perspective

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Ounces of Prevention — The Public Policy Case for Taxes on Sugared Beverages

Kelly D. Brownell, Ph.D., and Thomas R. Frieden, M.D., M.P.H.

> Sugar, rum, and tobacco are commodities which are nowhere necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation.
>
> Adam Smith, *The Wealth of Nations*, 1776

The obesity epidemic has inspired calls for public health measures to prevent diet-related diseases. One controversial idea is now the subject of public debate: food taxes.

Forty states already have small taxes on sugared beverages and snack foods, but in the past year, Maine and New York have proposed large taxes on sugared beverages, and similar discussions have begun in other states. The size of the taxes, their potential for generating revenue and reducing consumption, and vigorous opposition by the beverage industry have resulted in substantial controversy. Because excess consumption of unhealthful foods underlies many leading causes of death, food taxes at local, state, and national levels are likely to remain part of political and public health discourse.

Sugar-sweetened beverages (soda sweetened with sugar, corn syrup, or other caloric sweeteners and other carbonated and uncarbonated drinks, such as sports and energy drinks) may be the single largest driver of the obesity epidemic. A recent meta-analysis found that the intake of sugared beverages is associated with increased body weight, poor nutrition, and displacement of more healthful beverages; increasing consumption increases risk for obesity and diabetes; the strongest effects are seen in studies with the best methods (e.g., longitudinal and interventional vs. correlational studies); and interventional studies show that reduced intake of soft drinks improves health.[1] Studies that do not support a relationship between consumption of sugared beverages and health outcomes tend to be conducted by authors supported by the beverage industry.[2]

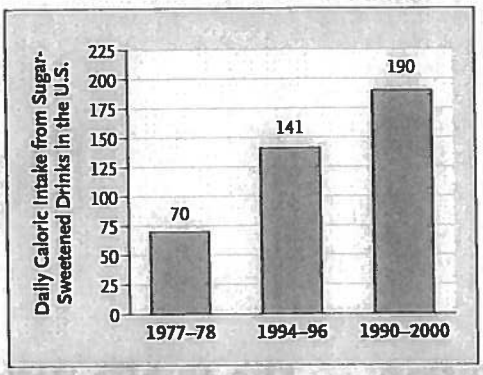
Sugared beverages are marketed extensively to children and adolescents, and in the mid-1990s, children's intake of sugared beverages surpassed that of milk. In the past decade, per capita intake of calories from sugar-sweetened beverages has increased by nearly 30% (see bar graph)[3]; beverages now account for 10 to 15% of the calories consumed by children and adolescents. For each extra can or glass of sugared beverage

consumed per day, the likelihood of a child's becoming obese increases by 60%.[4]

Taxes on tobacco products have been highly effective in reducing consumption, and data indicate that higher prices also reduce soda consumption. A review conducted by Yale University's Rudd Center for Food Policy and Obesity suggested that for every 10% increase in price, consumption decreases by 7.8%. An industry trade publication reported even larger reductions: as prices of carbonated soft drinks increased by 6.8%, sales dropped by 7.8%, and as Coca-Cola prices increased by 12%, sales dropped by 14.6%.[5] Such studies — and the economic principles that support their findings — suggest that a tax on sugared beverages would encourage consumers to switch to more healthful beverages, which would lead to reduced caloric intake and less weight gain.

The increasing affordability of soda — and the decreasing affordability of fresh fruits and vegetables (see line graph) — probably contributes to the rise in obesity in the United States. In 2008, a group of child and health care advocates in New York proposed a one-penny-per-ounce excise tax on sugared beverages, which would be expected to reduce consumption by 13% — about two servings per week per person. Even if one quarter of the calories consumed from sugared beverages are replaced by other food, the decrease in consumption would lead to an estimated reduction of 8000 calories per person per year — slightly more than 2 lb each year for the average person. Such a reduction in calorie consumption would be expected to substantially reduce the risk of obesity and diabetes and may also reduce the risk of heart disease and other conditions.

Some argue that government should not interfere in the market and that products and prices will change as consumers demand more healthful food, but several considerations support government action. The first is externality — costs to parties not directly involved in a transaction. The contribution of unhealthful diets to health care costs is already high and is increasing — an estimated $79 billion is spent annually for overweight and obesity alone — and approximately half of these costs are paid by Medicare and Medicaid, at taxpayers' expense. Diet-related diseases also cost society in terms of decreased work productivity, increased absenteeism, poorer school performance, and reduced fitness on the part of military recruits, among other negative effects.



Daily Caloric Intake from Sugar-Sweetened Drinks in the United States.

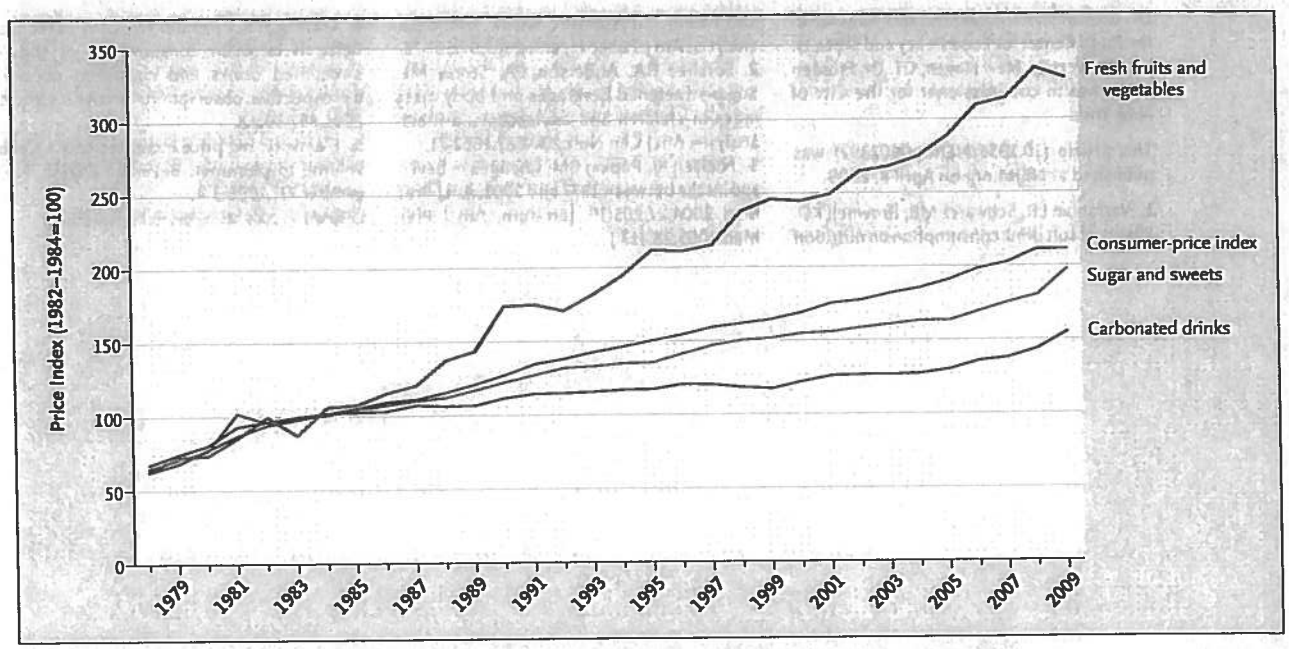
Data are from Nielsen and Popkin.[3]

The second consideration is information asymmetry between the parties to a transaction. In the case of sugared beverages, marketers commonly make health claims (e.g., that such beverages provide energy or vitamins) and use techniques that exploit the cognitive vulnerabilities of young children, who often cannot distinguish a television program from an advertisement.

A third consideration is revenue generation, which can further increase the societal benefits of a tax on soft drinks. A penny-per-ounce excise tax would raise an estimated $1.2 billion in New York State alone. In times of economic hardship, taxes that both generate this much revenue and promote health are better options than revenue initiatives that may have adverse effects.

Objections have certainly been raised: that such a tax would be regressive, that food taxes are not comparable to tobacco or alcohol taxes because people must eat to survive, that it is unfair to single out one type of food for taxation, and that the tax will not solve the obesity problem. But the poor are disproportionately affected by diet-related diseases and would derive the greatest benefit from reduced consumption; sugared beverages are not necessary for survival; Americans consume about 250 to 300 more calories daily today than they did several decades ago, and nearly half this increase is accounted for by consumption of sugared beverages; and though no single intervention will solve the obesity problem, that is hardly a reason to take no action.

The full impact of public policies becomes apparent only after they take effect. We can estimate changes in sugared-drink consumption that would be prompted by a tax, but accompanying changes in the consumption of other foods or beverages are more difficult to predict. One question



Relative Price Changes for Fresh Fruits and Vegetables, Sugars and Sweets, and Carbonated Drinks, 1978–2009.
Data are from the Bureau of Labor Statistics and represent the U.S. city averages for all urban consumers in January of each year.

is whether the proportions of calories consumed in liquid and solid foods would change. And shifts among beverages would have different effects depending on whether consumers substituted water, milk, diet drinks, or equivalent generic brands of sugared drinks.

Effects will also vary depending on whether the tax is designed to reduce consumption, generate revenue, or both; the size of the tax; whether the revenue is earmarked for programs related to nutrition and health; and where in the production and distribution chain the tax is applied. Given the heavy consumption of sugared beverages, even small taxes will generate substantial revenue, but only heftier taxes will significantly reduce consumption.

Sales taxes are the most common form of food tax, but because they are levied as a percentage of the retail price, they encourage the purchase of less-expensive brands or larger containers. Excise taxes structured as a fixed cost per ounce provide an incentive to buy less and hence would be much more effective in reducing consumption and improving health. In addition, manufacturers generally pass the cost of an excise tax along to their customers, including it in the price consumers see when they are making their selection, whereas sales taxes are seen only at the cash register.

Although a tax on sugared beverages would have health benefits regardless of how the revenue was used, the popularity of such a proposal increases greatly if revenues are used for programs to prevent childhood obesity, such as media campaigns, facilities and programs for physical activity, and healthier food in schools. Poll results show that support of a tax on sugared beverages ranges from 37 to 72%; a poll of New York residents found that 52% supported a "soda tax," but the number rose to 72% when respondents were told that the revenue would be used for obesity prevention. Perhaps the most defensible approach is to use revenue to subsidize the purchase of healthful foods. The public would then see a relationship between tax and benefit, and any regressive effects would be counteracted by the reduced costs of healthful food.

A penny-per-ounce excise tax could reduce consumption of sugared beverages by more than 10%. It is difficult to imagine producing behavior change of this magnitude through education alone, even if government devoted massive resources to the task. In contrast, a sales tax on sugared drinks would generate considerable revenue, and as with the tax on tobacco, it could become a key tool in efforts to improve health.

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HEALTH POLICY REPORT

The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages

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The consumption of sugar-sweetened beverages has been linked to risks for obesity, diabetes, and heart disease[1-3]; therefore, a compelling case can be made for the need for reduced consumption of these beverages. Sugar-sweetened beverages are beverages that contain added, naturally derived caloric sweeteners such as sucrose (table sugar), high-fructose corn syrup, or fruit-juice concentrates, all of which have similar metabolic effects.

Taxation has been proposed as a means of reducing the intake of these beverages and thereby lowering health care costs, as well as a means of generating revenue that governments can use for health programs.[4-7] Currently, 33 states have sales taxes on soft drinks (mean tax rate, 5.2%), but the taxes are too small to affect consumption and the revenues are not earmarked for programs related to health. This article examines trends in the consumption of sugar-sweetened beverages, evidence linking these beverages to adverse health outcomes, and approaches to designing a tax system that could promote good nutrition and help the nation recover health care costs associated with the consumption of sugar-sweetened beverages.

CONSUMPTION TRENDS AND HEALTH OUTCOMES

In recent decades, intake of sugar-sweetened beverages has increased around the globe; for example, intake in Mexico doubled between 1999 and 2006 across all age groups.[8] Between 1977 and 2002, the per capita intake of caloric beverages doubled in the United States across all age groups[9] (Fig. 1). The most recent data (2005–2006) show that children and adults in the United States consume about 172 and 175 kcal daily, respectively, per capita from sugar-sweetened beverages.

The relationship between the consumption of sugar-sweetened beverages and body weight has been examined in many cross-sectional and longitudinal studies and has been summarized in systematic reviews.[1,2] A meta-analysis showed positive associations between the intake of sugar-sweetened beverages and body weight — associations that were stronger in longitudinal studies than in cross-sectional studies and in studies that were not funded by the beverage industry than in those that were.[2] A meta-analysis of studies involving children[10] — a meta-analysis that was supported by the beverage industry — was interpreted as showing that there was no evidence of an association between consumption of sugar-sweetened beverages and body weight, but it erroneously gave large weight to several small negative studies; when a more realistic weighting was used, the meta-analysis summary supported a positive association.[11] A prospective study involving middle-school students over the course of 2 academic years showed that the risk of becoming obese increased by 60% for every additional serving of sugar-sweetened beverages per day.[12] In an 8-year prospective study involving women, those who increased their consumption of sugar-sweetened beverages at year 4 and maintained this increase gained 8 kg, whereas those who decreased their intake of sugar-sweetened beverages at year 4 and maintained this decrease gained only 2.8 kg.[13]

Short-term clinical trials provide an experimental basis for understanding the way in which sugar-sweetened beverages may affect adiposity. Tordoff and Alleva[14] found that as compared with total energy intake and weight during a 3-week period in which no beverages were provided, total energy intake and body weight increased when subjects were given 530 kcal of sugar-sweetened beverages per day for 3 weeks but decreased when

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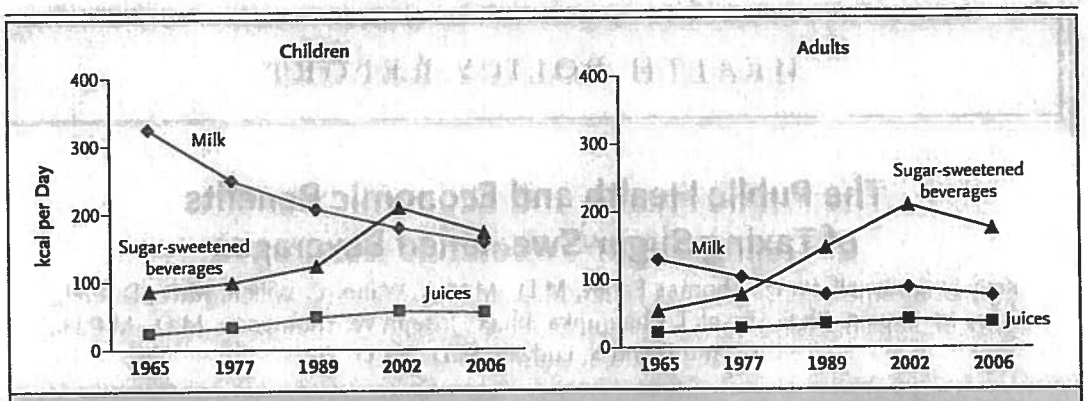

Figure 1. U.S. Trends in Per Capita Calories from Beverages.
Data are for U.S. children 2 to 18 years of age and adults 19 years of age or older. Data have been weighted to be nationally representative, with the use of methods that generate measures of each beverage that are comparable over time. Data for 1965–2002 are from Duffey and Popkin[9]; data for 2005–2006 have not been published previously.

subjects were given noncaloric sweetened beverages for the same length of time. Raben et al.[15] reported that obese subjects gained weight when they were given sucrose, primarily in the form of sugar-sweetened beverages, for 10 weeks, whereas they lost weight when they were given noncaloric sweeteners for the same length of time.

Four long-term, randomized, controlled trials examining the relationship between the consumption of sugar-sweetened beverages and body weight have been reported; the results showed the strongest effects among overweight persons. A school-based intervention to reduce the consumption of carbonated beverages was assessed among 644 students, 7 to 11 years of age, in the United Kingdom with the use of a cluster design.[16] After 1 year, the intervention group, as compared with the control group, had a nonsignificantly lower mean body-mass index (the weight in kilograms divided by the square of the height in meters) and a significant 7.7% lower incidence of obesity. In a study involving 1140 Brazilian schoolchildren, 9 to 12 years of age, that was designed to discourage the consumption of sugar-sweetened beverages, no overall effect on body-mass index was observed during the 9-month academic year.[17] Among students who were overweight at baseline, the body-mass index was nonsignificantly decreased in the intervention group as compared with the control group; the difference was significant among overweight girls. In another clinical trial, 103 high-school students in Boston were assigned to a control group or to an intervention group that received home delivery of noncaloric beverages for 25 weeks. The body-mass index was nonsignificantly reduced in the overall intervention group, but among students in the upper third of body-mass index at baseline, there was a significant decrease in the body-mass index in the intervention group, as compared with the control group (a decrease of 0.63 vs. an increase of 0.12).[18] The effects of replacing sugar-sweetened beverages with milk products were examined among 98 overweight Chilean children.[19] After 16 weeks, there was a nonsignificantly lower increase in the percentage of body fat in the intervention group than in the control group (0.36% and 0.78% increase, respectively), whereas there was a significantly greater increase in lean mass in the intervention group (0.92 vs. 0.62 kg).

Three prospective, observational studies — one involving nurses in the United States, one involving Finnish men and women, and one involving black women — each showed positive associations between the consumption of sugar-sweetened beverages and the risk of type 2 diabetes.[13,20,21] Among the 91,249 women in the Nurses' Health Study II who were followed for 8 years, the risk of diabetes among women who consumed one or more servings of sugar-sweetened beverages per day was nearly double the risk among women who consumed less than one serving of sugar-sweetened beverages per month[13]; about half the excess risk was accounted for by greater body weight. Among black women, excess weight accounted for most of the excess risk.

Among 88,520 women in the Nurses' Health

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Study, the risk of coronary heart disease among women who consumed one serving of sugar-sweetened beverages per day, as compared with women who consumed less than one serving per month, was increased by 23%, and among those who consumed two servings or more per day, the risk was increased by 35%.[3] Increased body weight explained some, but not all, of this association.

MECHANISMS LINKING SUGAR-SWEETENED BEVERAGES WITH POOR HEALTH

A variety of behavioral and biologic mechanisms may be responsible for the associations between the consumption of sugar-sweetened beverages and adverse health outcomes, with some links (e.g., the link between intake of sugar-sweetened beverages and weight gain) better established than others. The well-documented adverse physiological and metabolic consequences of a high intake of refined carbohydrates such as sugar include the elevation of triglyceride levels and of blood pressure and the lowering of high-density lipoprotein cholesterol levels, which would be expected to increase the risk of coronary heart disease.[22] Because of the high glycemic load of sugar-sweetened beverages, consumption of these beverages would be expected to increase the risk of diabetes by causing insulin resistance and also through direct effects on pancreatic islet cells.[23] Observational research has shown that consumption of sugar-sweetened beverages, but not of noncalorically sweetened beverages, is associated with markers of insulin resistance.[24]

Intake of sugar-sweetened beverages may cause excessive weight gain owing in part to the apparently poor satiating properties of sugar in liquid form. Indeed, adjustment of caloric intake at subsequent meals for energy that had been consumed as a beverage is less complete than adjustment of intake for energy that had been consumed as a solid food.[25] For example, in a study involving 323 adults, in which 7-day food diaries were used, energy from beverages added to total energy intake instead of displacing other sources of calories.[26] The results of a study of school-age children were consistent with the data from adults and showed that children who drank 9 oz or more of sugar-sweetened beverages per day consumed nearly 200 kcal per day more than those who did not drink sugar-sweetened beverages.[27]

Short-term studies of the effect of beverage consumption on energy intake support this mechanism. Among 33 adults who were given identical test lunches on six occasions but were given beverages of different types (sugar-sweetened cola, noncaloric cola, or water) and amounts (12 oz [355 ml] or 18 oz [532 ml]),[28] the intake of solid food did not differ across conditions; the result was that there was significantly greater total energy consumption when the sugar-sweetened beverages were served.

Sugar-sweetened beverages may also affect body weight through other behavioral mechanisms. Whereas the intake of solid food is characteristically coupled to hunger, people may consume sugar-sweetened beverages in the absence of hunger, to satisfy thirst or for social reasons. Sugar-sweetened beverages may also have chronic adverse effects on taste preferences and food acceptance. Persons — especially children — who habitually consume sugar-sweetened beverages rather than water may find more satiating but less sweet foods (e.g., vegetables, legumes, and fruits) unappealing or unpalatable, with the result that their diet may be of poor quality.

ECONOMIC RATIONALE

Economists agree that government intervention in a market is warranted when there are "market failures" that result in less-than-optimal production and consumption.[29,30] Several market failures exist with respect to sugar-sweetened beverages. First, because many persons do not fully appreciate the links between consumption of these beverages and health consequences, they make consumption decisions with imperfect information. These decisions are likely to be further distorted by the extensive marketing campaigns that advertise the benefits of consumption. A second failure results from time-inconsistent preferences (i.e., decisions that provide short-term gratification but long-term harm). This problem is exacerbated in the case of children and adolescents, who place a higher value on present satisfaction while more heavily discounting future consequences. Finally, financial "externalities" exist in the market for sugar-sweetened beverages in that consumers do not bear the full costs of their consumption decisions. Because of the contribu-

tion of the consumption of sugar-sweetened beverages to obesity, as well as the health consequences that are independent of weight, the consumption of sugar-sweetened beverages generates excess health care costs. Medical costs for overweight and obesity alone are estimated to be $147 billion — or 9.1% of U.S. health care expenditures — with half these costs paid for publicly through the Medicare and Medicaid programs.[31]

AN EFFECTIVE TAX POLICY AND PROJECTED EFFECTS

Key factors to consider in developing an effective policy include the definition of taxable beverages, the type of tax (sales tax or excise tax), and the tax rate. We propose an excise tax of 1 cent per ounce for beverages that have any added caloric sweetener. An alternative would be to tax beverages that exceed a threshold of grams of added caloric sweetener or of kilocalories per ounce. If this approach were used, we would recommend that the threshold be set at 1 g of sugar per ounce (30 ml) (32 kcal per 8 oz [237 ml]). Another option would be a tax assessed per gram of added sugar, but such an approach would be difficult to administer. The advantage of taxing beverages that have any added sugar is that this kind of tax is simpler to administer and it may promote the consumption of no-calorie beverages, most notably water; however, a threshold approach would also promote calorie reductions and would encourage manufacturers to reformulate products. A consumer who drinks a conventional soft drink (20 oz [591 ml]) every day and switches to a beverage below this threshold would consume approximately 174 fewer calories each day.

A specific excise tax (a tax levied on units such as volume or weight) per ounce or per gram of added sugar would be preferable to a sales tax or an ad valorem excise tax (a tax levied as a percentage of price) and would provide an incentive to reduce the amount of sugar per ounce of a sugar-sweetened beverage. Sales taxes added as a percentage of retail cost would have three disadvantages: they could simply encourage the purchase of lower-priced brands (thus resulting in no calorie reduction) or of large containers that cost less per ounce; consumers would become aware of the added tax only after making the decision to purchase the beverage; and the syrups that are used in fountain drinks, which are often served with multiple refills, would remain untaxed. A number of states currently exempt sugar-sweetened beverages from sales taxes along with food, presumably because food is a necessity. This practice should be eliminated, whether or not an excise tax is enacted.

Excise taxes could be levied on producers and wholesalers, and the cost would almost certainly be passed along to retailers, who would then incorporate it into the retail price; thus, consumers would become aware of the cost at the point of making a purchase decision. Taxes levied on producers and wholesalers would be much easier to collect and enforce than taxes levied on retailers because of the smaller number of businesses that would have to comply with the tax; in addition, the sugar used in syrups could be taxed — a major advantage because of the heavy sales of fountain drinks. Experience with tobacco and alcohol taxes suggests that specific excise taxes have a greater effect on consumption than do ad valorem excise taxes and can also generate more stable revenues because they are less dependent on industry pricing strategies.[32] In addition, tax laws should be written with provisions for the regular adjustment of specific excise taxes to keep pace with inflation, in order to prevent the effect of the taxes on both prices and revenues from eroding over time.

A tax of 1 cent per ounce of beverage would increase the cost of a 20-oz (591-ml) soft drink by 15 to 20%. The effect on consumption can be estimated through research on price elasticity (i.e., consumption shifts produced by price). The price elasticity for all soft drinks is in the range of −0.8 to 1.0.[33] (Elasticity of −0.8 suggests that for every 10% increase in price, there would be a decrease in consumption of 8%, whereas elasticity of 1.0 suggests that for every 10% increase in price, there would be a decrease in consumption of 10%.) Even greater price effects are expected from taxing only sugar-sweetened beverages, since some consumers will switch to diet beverages. With the use of a conservative estimate that consumers would substitute calories in other forms for 25% of the reduced calorie consumption, an excise tax of 1 cent per ounce would lead to a minimum reduction of 10% in calorie consumption from sweetened beverages, or 20 kcal per person per day, a reduction that is sufficient for weight loss and reduction in risk (unpublished

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data). The benefit would be larger among consumers who consume higher volumes, since these consumers are more likely to be overweight and appear to be more responsive to prices.[7] Higher taxes would have greater benefits.

A controversial issue is whether to tax beverages that are sweetened with noncaloric sweeteners. No adverse health effects of noncaloric sweeteners have been consistently demonstrated, but there are concerns that diet beverages may increase calorie consumption by justifying consumption of other caloric foods or by promoting a preference for sweet tastes.[34] At present, we do not propose taxing beverages with noncaloric sweeteners, but we recommend close tracking of studies to determine whether taxing might be justified in the future.

REVENUE-GENERATING POTENTIAL

The revenue generated from a tax on sugar-sweetened beverages would be considerable and could be used to help support childhood nutrition programs, obesity-prevention programs, or health care for the uninsured or to help meet general revenue needs. A national tax of 1 cent per ounce on sugar-sweetened beverages would raise $14.9 billion in the first year alone. Taxes at the state level would also generate considerable revenue — for example, $139 million in Arkansas, $183 million in Oregon, $221 million in Alabama, $928 million in Florida, $937 million in New York, $1.2 billion in Texas, and $1.8 billion in California. A tax calculator that is available online can generate revenue numbers for states and 25 major cities.[35]

OBJECTIONS, INDUSTRY REACTION, PUBLIC SUPPORT, AND FRAMING

One objection to a tax on sugar-sweetened beverages is that it would be regressive. This argument arose with respect to tobacco taxes but was challenged successfully by proponents of the taxes, who pointed out that the poor face a disproportionate burden of smoking-related illnesses, that nearly all smokers begin to smoke when they are teenagers, and that both groups are sensitive to price changes.[7] In addition, some of the tobacco revenue has been used for programs developed specifically for the poor and for youth. The poor are most affected by illnesses that are related to unhealthful diets, and brand loyalties for beverages tend to be set by the teenage years. In addition, sugar-sweetened beverages are not necessary for survival, and an alternative (i.e., water) is available at little or no cost; hence, a tax that shifted intake from sugar-sweetened beverages to water would benefit the poor both by improving health and by lowering expenditures on beverages. Designating revenues for programs promoting childhood nutrition, obesity prevention, or health care for the uninsured would preferentially help those most in need.

A second objection is that taxing sugar-sweetened beverages will not solve the obesity crisis and is a blunt instrument that affects even those who consume small amounts of such beverages. Seat-belt legislation and tobacco taxation do not eliminate traffic accidents and heart disease but are nevertheless sound policies. Similarly, obesity is unlikely to yield to any single policy intervention, so it is important to pursue multiple opportunities to obtain incremental gains. Reducing caloric intake by 1 to 2% per year would have a marked impact on health in all age groups, and the financial burden on those who consumed small amounts of sugar-sweetened beverages would be minimal.

Opposition to a tax by the beverage industry is to be expected, given the possible effect on sales; opposition has been seen in jurisdictions that have considered such taxes and can be predicted from the behavior of the tobacco industry under similar circumstances.[36] PepsiCo threatened to move its corporate headquarters out of New York when the state considered implementing an 18% sales tax on sugar-sweetened beverages.[37] The tobacco industry fought policy changes by creating front groups with names that suggested community involvement. The beverage industry has created Americans Against Food Taxes.[38] These reactions suggest that the beverage industry believes that a tax would have a substantial impact on consumption.

Public support for food and beverage taxes to address obesity has increased steadily. Questions about taxes in polls have been asked in various ways, and the results are therefore not directly comparable from year to year, but overall trends are clear. Support for food taxes rose from 33% in 2001 to 41% in 2003 and then to 54% in 2004.[39] A 2008 poll of New York State residents showed that 52% of respondents support a soda

tax; 72% support such a tax if the revenue is used to support programs for the prevention of obesity in children and adults. The way in which the issue is framed is essential; support is highest when the tax is introduced in the context of promoting health and when the revenues are earmarked for programs promoting childhood nutrition or obesity prevention.

CONCLUSIONS

The federal government, a number of states and cities, and some countries (e.g., Mexico[8]) are considering levying taxes on sugar-sweetened beverages. The reasons to proceed are compelling. The science base linking the consumption of sugar-sweetened beverages to the risk of chronic diseases is clear. Escalating health care costs and the rising burden of diseases related to poor diet create an urgent need for solutions, thus justifying government's right to recoup costs.

As with any public health intervention, the precise effect of a tax cannot be known until it is implemented and studied, but research to date suggests that a tax on sugar-sweetened beverages would have strong positive effects on reducing consumption.[5,33] In addition, the tax has the potential to generate substantial revenue to prevent obesity and address other external costs resulting from the consumption of sugar-sweetened beverages, as well as to fund other health-related programs. Much as taxes on tobacco products are routine at both state and federal levels because they generate revenue and they confer a public health benefit with respect to smoking rates, we believe that taxes on beverages that help drive the obesity epidemic should and will become routine.

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Sugar-Sweetened Beverage Taxes and Public Health

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Research Brief

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Introduction

Obesity rates among U.S. children, adolescents and adults have increased dramatically over the past four decades.[1,2] Today, nearly one-third of all children and adolescents in the country–more than 23 million–are overweight or obese, and are therefore at greater risk for heart disease, type 2 diabetes and a host of other serious diseases.[3,4] Rising obesity rates have motivated policy-makers to implement policies that can improve access to affordable, healthy foods and increase opportunities for physical activity in schools and communities across the country.

In the past decade, states and localities also have begun to consider taxing sugar-sweetened beverages (SSBs)–including sodas, sports drinks, sweetened tea, fruit drinks and punches, and other sweetened beverages–in order to generate revenue, reduce consumption of unhealthy beverages and promote public health.[5]

Research has shown that relatively large increases in taxes on cigarettes and other tobacco products are the single most effective policy approach to reducing tobacco use.[6,7,8,9] Additionally, dedicating a portion of the revenues gained from such taxes to comprehensive tobacco control programs has led to further reductions in tobacco use among youth and adults.[10,11,12]

Although there are many significant differences between tobacco and SSBs, the tobacco example provides a model for how taxes can be used to promote public health. Emerging studies suggest that small taxes on SSBs are unlikely to affect obesity rates, but they can generate revenue that states can invest in improving public health. In addition, while there is only limited research on the impact of taxes on SSB consumption rates and related weight outcomes, existing research on the impact of prices on food-purchasing behaviors in general suggests that substantive taxes on SSBs could significantly affect consumption patterns and thereby have an impact on overweight and obesity rates. This brief provides an overview of the current research on the health impacts of SSB consumption, how food and beverage prices affect consumption and related weight outcomes, and the potential impact of both large and small SSB taxes.

Key Research Results

Substantial consumption of sugar-sweetened beverages can be detrimental to overall health and may contribute to higher obesity rates among youth.

- A growing but mixed body of research indicates that an increase in SSB consumption is associated with increases in caloric intake, weight gain, obesity and a variety of other negative health consequences among children, teens and adults.[13,14,15,16]
- Increased consumption of SSBs in adults has been linked with higher rates of type 2 diabetes, and a school-based intervention that lowered SSB consumption among Native American adolescents significantly reduced plasma insulin levels, a risk factor for type 2 diabetes.[17,18]
- SSB intake is associated with inadequate intake of several important nutrients, including calcium, iron, folate and vitamin A.[19,20,21,22]

As prices of unhealthy foods and beverages increase, consumption of them decreases.

- Numerous studies demonstrate that changes in the relative prices of foods and beverages lead to changes in how much people consume them.[23,24,25] Several of these studies have estimated that a 10 percent increase in the price of SSBs could reduce consumption of them by 8 percent to 11 percent.[26,27,28,29]
- A few studies have concluded that, in response to changes in relative prices, some consumers will substitute a healthier beverage for an SSB. For example, a study conducted in 2004 found that increases in SSB prices resulted in small increases in consumption of whole and reduced-fat milk, juice, coffee and tea.[30,31]

As relative prices of unhealthy foods increase, compared with prices of healthy foods, weight levels decrease.

- A small but growing body of national research indicates that higher prices of unhealthy foods and beverages versus healthy ones are associated with reductions in BMI and the prevalence of overweight and obesity.[32,33,34,35,36,37,38,39,40]
- One of these studies found that an increase in the price of sugary foods would significantly reduce the prevalence of overweight and obesity among adults, leading the authors to conclude that taxing such foods, thereby increasing their relative cost, would likely be an effective strategy to reduce adult obesity rates.[41]
- Other studies show similar relationships between fast-food prices and weight.[42,43,44] For example, one study found that a 10 percent increase in the price of fast food was associated with a nearly 6 percent reduction in the prevalence of adolescent obesity.[45]

Children and adolescents, lower-income populations and those already overweight are potentially most responsive to changes in the relative prices of foods and beverages.

- Emerging research on the impact of food prices on weight and obesity indicates that weight levels for youths, lower-income populations and those who already have elevated BMIs are more strongly associated with food and beverage prices than are those of older, healthier-weight and higher-income populations.[46,47,48,49,50]
- For example, one study found that the BMI of children living below the federal poverty level was about 50 percent more sensitive to fruit and vegetable pricing than was the BMI of higher-income children. The same study also found that, among children who already had a BMI above the healthy range, BMI was 39 percent more sensitive to these prices than was BMI for their healthy-weight peers.[51]
- Two recent studies examined the link between state SSB taxes and weight, providing only weak evidence that existing, relatively modest taxes (the average for all states is currently just 3.4 percent) are associated with adolescent and adult weight levels.[52,53] These findings are consistent with the growing research on food prices and weight that suggests that sizable changes in the relative prices of healthier foods compared with less healthy ones are required to significantly change BMI levels and the prevalence of overweight and obesity.[54,55,56,57,58,59]
- One recent study examining state taxation of soft drinks, candy, chips and other snack foods found that, while few states impose excise taxes on these products, many "disfavor" them under their sales tax system by taxing them at a higher rate than other food products.[60,i] As of January 1, 2009, 33 states applied a sales tax to soft drinks, at an average rate of 5.2 percent. The average sales tax on soft drinks for all

i Excise taxes are taxes imposed on selected products, often at the producer, wholesaler or distributor level, and can be specific (e.g., based on quantity, weight or volume) or *ad valorem* (based on price). In contrast, sales taxes are taxes imposed on a broad range of goods and services and are generally assessed at the point of sale to consumers and as a percentage of price.

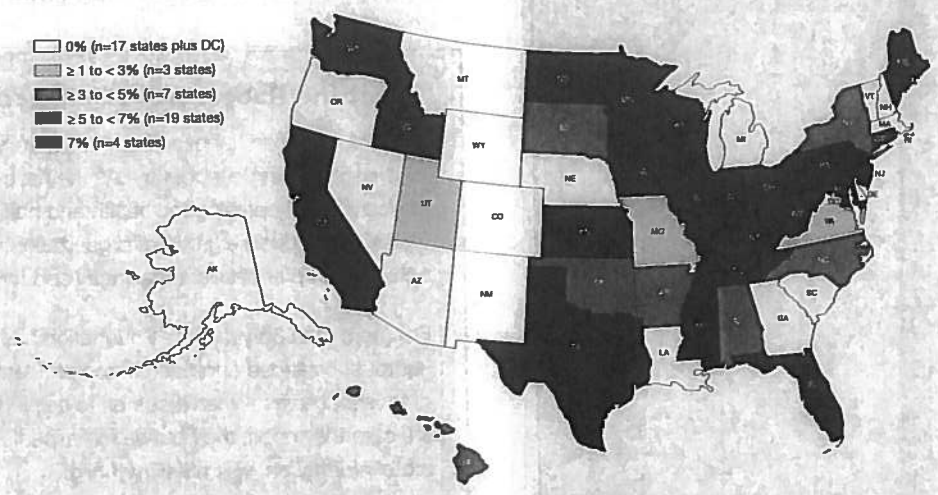
states, including those that do not tax them, was 3.4 percent, more than triple the 1.0 percent average applied to foods and beverages generally (see Figure 1).[61]

Conclusions & Implications

The effectiveness of increased tobacco taxes in reducing tobacco use has stimulated interest in taxes as a policy tool for helping to reverse the national rise in obesity rates.[62] Taxes on SSBs are of particular interest given the research linking consumption of such beverages to weight gain and obesity among children, adolescents and adults. The potential of significant SSB taxes to reduce obesity rates is supported by a number of studies showing that soft drink consumption falls when soft drink prices rise and that changes in the relative prices of healthier foods and beverages compared with less healthy products are associated with changes in weight. However, additional research is needed to fully determine the net impact of changes in SSB prices on overall caloric intake.

While many states currently tax SSBs, mostly by disfavoring them under their sales tax systems, limited recent research suggests these modest taxes, which average only 5.2 percent among states that do apply such taxes, have had little impact on weight. However, emerging research suggests that significant differences in the relative prices of healthier foods and beverages compared with those that are less healthy could help to reduce BMI and the prevalence of overweight and obesity, particularly for the young and lower-income populations that are most at risk for obesity. This suggests that raising SSB taxes to levels that would result in substantially higher SSB prices, either through an excise tax or increased sales taxes, could be a potent policy tool for curbing obesity rates by leading consumers to reduce their SSB consumption. Such policy efforts could achieve an even greater impact if they allocated some of the revenues from these taxes to the support of other obesity-reduction and -prevention efforts. There is a critical need for more research to answer these questions, and much can be learned by assessing the potential impact of large SSB taxes yet to be adopted in states and communities that are currently considering them.

State Soda Sales Tax Rates (as of January 1, 2009)



Source: Bridging the Gap Program, Health Policy Center, University of Illinois at Chicago with data compiled by The MayaTech Corporation. In addition to sales taxes, the following states currently apply excise taxes to bottles, syrups, and/or powders/mixes at the manufacturer, distributor or retail level: Alabama, Arkansas, Rhode Island, Tennessee, Virginia, Washington, and West Virginia.

About the Authors

This brief was developed through the collaborative efforts of Bridging the Gap and Healthy Eating Research. Frank Chaloupka, co-director of Bridging the Gap, and researchers Lisa Powell and Jamie Chriqui from that program produced the brief in collaboration with Mary Story, director of Healthy Eating Research.

About Bridging the Gap

Bridging the Gap is a Robert Wood Johnson Foundation funded nationally recognized research program dedicated to improving the understanding of how policies and environmental factors affect diet, physical activity and obesity among youth, as well as youth tobacco use. The program identifies and tracks information at the state, community and school levels; measures change over time; and shares findings that will help advance effective solutions for reversing the childhood obesity epidemic and preventing young people from smoking. Bridging the Gap is a joint project of the University of Illinois at Chicago's Institute for Health Research and Policy and the University of Michigan's Institute for Social Research. For more information, visit *www.impacteen.org*.

About Healthy Eating Research

Healthy Eating Research is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by the University of Minnesota School of Public Health under the direction of Mary Story, Ph.D., R.D., program director, and Karen M. Kaphingst, M.P.H., deputy director. The Healthy Eating Research program supports research to identify, analyze and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children in low-income and racial/ethnic populations at highest risk for obesity. For more information, visit *www.healthyeatingresearch.org*.

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For more than 35 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime. For more information, visit **www.rwjf.org**.

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APPENDIX A

Findings for Model Sugar-Sweetened Beverage Tax Legislation

Developed by the National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN), a ChangeLab Solution

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Support provided by a grant from the Robert Wood Johnson Foundation.

June 2011 (updated July 2012)

Appendix A. Findings.

The Legislature finds that over the past 30 years, the obesity rate in the United States has more than doubled. According to statistics compiled by the Centers for Disease Control and Prevention, in 2009–2010, 35.7 percent of the country's adult population was considered obese (body mass index (BMI) of 30 and above) — over 78 million U.S. adults. In [_____], [*Insert State's obese population percentage here*] of our State's adult residents were considered obese in 2010.

COMMENT: Sources: Ogden CL, Carroll MD, Kit BK, Flegal KM. "Prevalence of Obesity in the United States, 2009–2010. NCHS data brief, no 82. Hyattsville, MD: National Center for Health Statistics. 2012. Available at: www.cdc.gov/nchs/data/databriefs/db82.pdf.

Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System. *Prevalence and Trends Data: Overweight and Obesity BMI–2010*. Available at: http://apps.nccd.cdc.gov/brfss/ and www.cdc.gov/obesity/data/trends.html.

The Legislature further finds that for children, the increase in obesity has been even more dramatic, with the obesity rate among children ages 6-11 more than quadrupling over the last four decades. According to the Centers for Disease Control and Prevention in 2009-2010, 16.9 percent of U.S. children and adolescents were obese — more than 12.5 million children and adolescents ages 2-19. The State of [_____] is not immune to the problem. [*Insert State's school-age children obesity percentage here]* of [_____] school-age

children were overweight or obese in 2009, according to CDC guidelines.

COMMENT: Source: Ogden CL, Carroll MD, Curtin LR, et al.. "Prevalence of High Body Mass Index in US Children and Adolescents, 2007–2008." *Journal of the American Medical Association*, 303(3): 242–249, 2010. Available at: www.jama.ama-assn.org/content/303/3/242.full.

Gortmaker S, Long M, and Wang YC. *The Negative Impact of Sugar-Sweetened Beverages on Children's Health*. Healthy Eating Research. November 2009. Available at: www.rwjf.org/files/research/20091203herssb.pdf.

Several organizations provide state-specific information breaking down the extent of the obesity epidemic in a specific state. Two thorough sources are:

Trust for America's Health. *F as in Fat: How Obesity Threatens America's Future*. 2010. Available at: http://healthyamericans.org/reports/obesity2010/.

Centers for Disease Control and Prevention (CDC). Gortmaker S, Long M, and Wang YC. *The Negative Impact of Sugar-Sweetened Beverages on Children's Health*. Healthy Eating Research. November 2009. Available at: www.rwjf.org/files/research/20091203herssb.pdf. Youth Risk Behavior Surveillance System. *Youth Online: High School YRBS*. Available at: http://apps.nccd.cdc.gov/yrbss.

The Legislature further finds that obese children are at least twice as likely as non-obese children to become obese adults. Research indicates that the likelihood of an obese child becoming an obese adult increases with age; adolescents who are obese have a greater likelihood of being obese in adulthood, as compared with younger children.

COMMENT: Source: Serdula MK, Ivery D, Coates RJ, et al. "Do Obese Children Become Obese Adults? A Review of the Literature." *Preventive Medicine*, 22(2): 167–177, 1993.

The Legislature further finds that sugar-sweetened beverage consumption is associated with a number of adverse health effects, including type 2 diabetes, asthma, heart disease, cancer, high blood pressure, and strokes.

In an eight-year study, women who consumed one or more servings of sugar-sweetened beverages a day had twice the risk of developing type 2 diabetes than women who consumed less than one serving of sugar-sweetened beverages a month. A separate study found that women who consumed one serving of sugar-sweetened beverages a day had a 23 percent higher risk of coronary heart disease than those who consume less than one a month.

Another study indicated similar results in men: in a 22-year epidemiological analysis of over 40,000 adult men, researchers found that the men with the highest sugar-sweetened

beverage intake had a 20 percent higher relative risk of coronary heart disease—defined as a fatal or nonfatal myocardial infarction (heart attack) than those in the bottom quartile after adjusting for dieting variety of other risk factors. The researchers concluded that a one serving per day increase in sugar-sweetened beverage intake increased the risk of coronary heart disease by 19 percent. A prospective study including 810 adults between the ages of 25 and 79 with prehypertension and stage I hypertension, recently found that a reduction of one serving per day in sugar-sweetened beverage consumption was associated with a statistically significant reduction in blood pressure over a period of 18 months. Another study found that sugar-sweetened beverage consumption is directly associated with higher blood pressure.

COMMENT: Sources: Brownell KD, Farley T, Willett WC, et al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages." *New England Journal of Medicine,* 361(16): 1599–605, 2009. Available at: www.yaleruddcenter.org/resources/upload/docs/what/policy/BenefitsSodaTaxNEJM9.09.pdf.

Chen L, Caballero B, Mitchell DC, et al. "Reducing Consumption of Sugar-Sweetened Beverages Is Associated with Reduced Blood Pressure: A Prospective Study Among United States Adults." *Circulation*, 121(22):2398-2406, 2010.

de Koning L, Malik VS, Kellogg MD, Rimm EB, Willett WC, Hu FB. "Sweetened Beverage Consumption, Incident Coronary Heart Disease and Biomarkers of Risk in Men." *Circulation*, 125: 1735-1741, 2012.

Brown IJ, Stamler J, Van Horn L, et al. "Sugar-Sweetened Beverage, Sugar Intake of Individuals, and Their Blood Pressure: International Study of Macro/Micronutrients and Blood Pressure." *Hypertension*, 57:695-701, 2011. Available at: http://hyper.ahajournals.org/content/57/4/695.full.pdf+html.

For a complete overview of the impact of sugar-sweetened beverages on public health, see: Chaloupka FJ, Powell LM, and Chriqui JF. *Sugar-Sweetened Beverage Taxes and Public Health.* Healthy Eating Research and Bridging the Gap, July 2009. Available at: www.rwjf.org/files/research/20090731ssbbrief.pdf.

For the most recent summary of research on sugar-sweetened beverages and health, see the Yale Rudd Center's website: www.yaleruddcenter.org/what_we_do.aspx?id=275.

Obesity-related health conditions cost the nation billions of dollars in health care costs and lost productivity; adult overweight and obesity account for $147 billion in health care costs nationally, or 9 percent of all medical spending, per year. Childhood obesity alone is estimated to cost $14 billion annually in direct health expenses, and children covered by Medicaid account for $3 billion of those expenses. Annually, the average total health expenses for a child treated for obesity under Medicaid is $6,730, while the average health

cost for all children covered by Medicaid is $2,446. The average total health expenses for a child treated for obesity under private insurance is $3,743, while the average health cost for all children covered by private insurance is $1,108. Obesity-related annual medical expenditures in the State of [_____] are estimated at [*Insert State's cost of adult obesity here*] million in 2003 dollars.

COMMENT: Sources: Finkelstein EA, Trogdon JG, Cohen JW, et al. "Annual Medical Spending Attributable To Obesity: Payer- And Service-Specific Estimates." *Health Affairs*, 28(5): w822–w831, 2009. Available at: www.obesity.procon.org/sourcefiles/FinkelsteinAnnualMedicalSpending.pdf.

Marder WD and Chang S. "Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions." *Thomson Medstat Research Brief*, 2006. Available at: www.medstat.com/pdfs/childhood_obesity.pdf.

For state-specific healthcare spending data, see:
Finkelstein EA, Fiebelkorn IC, and Wang G. "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity." *Obesity Research*, 12(1): 18-24, 2004. These state-level data are for 2003. State health agencies may have more recent spending data.

The Legislature further finds that according to nutritional standards, sugar-sweetened beverages such as nondiet soft drinks, energy drinks, sweet teas, and sports drinks offer little or no nutritional value but contain massive quantities of added sugars. For example, a 12-ounce can of soda contains the equivalent of approximately 8-10 teaspoons of sugar; the American Heart Association recommends that a person eating a 2,200-calorie diet should eat no more than 9 teaspoons of refined sugar in a day, and more recently, that a person eating a 2,000-calorie diet have a consumption goal of no more than 450 calories of sugar-sweetened beverages per week.

COMMENT: Sources: Jacobson MF. *Liquid Candy: How Soft Drinks Are Harming Americans' Health*. Washington, DC: Center for Science in the Public Interest, 2005. Available at: www.cspinet.org/new/pdf/liquid_candy_final_w_new_supplement.pdf.

Johnson RK, Appel LJ, Brands M, et al on behalf of the American Heart Association Nutrition Committee of the Council on Nutrition, Physical Activity and Metabolism and the Council on Epidemiology and Prevention. "Dietary Sugars Intake and Cardiovascular Health: A Scientific Statement from the American Heart Association." *Circulation*, 120: 1011–1020, 2009. Available at: http://circ.ahajournals.org/cgi/content/full/120/11/1011?ijkey=856cda3d8f34ccf7dff9a00a20598d22a58b115a.

Lloyd-Jones DM, Hong Y, Labarthe D, Mozaffarian D, Appel LJ, Van HL, et al. Defining and setting national goals for cardiovascular health promotion and disease reduction: The American Heart Association's strategic impact goal through 2020 and beyond. *Circulation,* 121(4):586–613. 2010. Available at: http://circ.ahajournals.org/content/121/4/586.full.

The Legislature further finds that numerous studies strongly support a link between obesity and consumption of sugar-sweetened beverages such as soft drinks, energy drinks, sweet teas, and sports drinks. A recent meta-analysis of epidemiological studies examining the relationship between sugar-sweetened beverages and obesity found a significant positive association between sugar-sweetened beverage intake and weight gain. In these data, the effect was strongest in larger studies with longer durations of follow-up with study participants. For example, long-term studies have shown that women who increased their consumption of sugar-sweetened beverages for four years gained an average of 17.6 pounds, whereas women who decreased their consumption of sugar-sweetened beverages for four years gained only 6.2 pounds. The effect of sugar-sweetened beverage consumption in children is even more staggering; for every additional serving of sugar-sweetened beverage that a child consumes a day, the likelihood of the child becoming obese increases by 60 percent. A recent cross-sectional study found that young adults who consumed 6 servings per day or more of sugar-sweetened beverages were 2 times more likely to be obese than those who did not consume sugar-sweetened beverages.

COMMENT: Sources: Brownell KD, Farley T, Willett WC, et al. "The Public Health and Economic Benefits of Taxing Sugar-sweetened Beverages." *New England Journal of Medicine,* 361(16): 1599–1605, 2009. Available at: www.yaleruddcenter.org/resources/upload/docs/what/policy/BenefitsSodaTaxNEJM9.09.pdf.

For a more detailed description of the negative impact of sugar-sweetened beverages on children's health, see: Gortmaker S, Long M, and Wang YC. *The Negative Impact of Sugar-Sweetened Beverages on Children's Health*. Healthy Eating Research. 2009. Available at: www.rwjf.org/files/research/20091203herssb.pdf.

Bermudez OI and Gao X. "Greater Consumption of Sweetened Beverages and Added Sugars Is Associated with Obesity among US Young Adults." *Annals of Nutrition & Metabolism*, 57(3-4): 211–218, 2010.

Malik VS, Popkin BM, Bray GA, et al. "Sugar-Sweetened Beverages, Obesity, Type 2 Diabetes Mellitus, and Cardiovascular Disease Risk." *Circulation*, 121(11): 1356–64, 2010.

The Legislature further finds that Americans are drinking more sugar-sweetened beverages than ever before. From 1977 to 2002, Americans doubled the amount of sugar-sweetened beverages they consumed. Sugar in liquid form accounts for over 40 per cent of the total added-sugar intake in the U.S. population and sweetened beverages displace healthier

and more nutrient-dense beverages like milk, 100% fruit juice and water. Additionally, soft drinks contribute more energy to the diet than any other single type of food or beverage. Children and adolescents now consume 10 to 13 percent of their daily caloric intake from sugar-sweetened beverages.

COMMENT: Sources: Brownell KD, Farley T, Willett WC, et al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages." *New England Journal of Medicine,* 361(16): 1599–605, 2009. Available at: www.yaleruddcenter.org/resources/upload/docs/what/policy/BenefitsSodaTaxNEJM9.09.pdf.

Ogden CL, Kit BK, Carroll MD, Park S. "Consumption of Sugar Drinks in the United States, 2005–2008." NCHS data brief, no 71. Hyattsville, MD: National Center for Health Statistics. 2011. Available at: www.cdc.gov/nchs/data/databriefs/db71.htm.

Woodward-Lopez G, Kao J, and Ritchie L. "To What Extent Have Sweetened Beverages Contributed to the Obesity Epidemic?" *Public Health Nutrition,* [Electronic publication ahead of print] September 23, 2010. Available at: www.foodpolitics.com/wp-content/uploads/Woodward-Impact-of-SSBs.PubHlthNutr-2011.pdf.

The Legislature finds that a tax on sugar-sweetened beverages would decrease consumption, reduce obesity and overweight prevalence, prevent disease, reduce health care costs, and generate significant revenue. One study estimates that a 10 percent increase in soft drink prices should reduce consumption by 8 percent to 10 percent. Researchers calculated that a penny-per-ounce nationwide tax on sugar-sweetened beverages – an extra 12 cents per can or 20 cents per bottle – would prevent 95,000 cases of coronary heart disease, 8,000 strokes, and 26,000 premature deaths, in addition to saving $17 billion in medical costs between 2010-2020. Another study estimates that a national penny-per-ounce tax on sugar sweetened beverages could generate $79 billion of new tax revenue between 2010 and 2015.

COMMENT: Sources: Andreyeva T, Long MW, Brownell KD. "The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food." *American Journal of Public Health*,100(2):216-22, 2010.

Wang CY, Coxson P, Shen Y, Goldman L, Bibbins-Domingo K. "A Penny-Per-Ounce Tax On Sugar-Sweetened Beverages Would Cut Health And Cost Burdens Of Diabetes." *Health Affairs,* 31(1):199-207, 2012. Available at: http://content.healthaffairs.org/content/31/1/199.full?ijkey=jyoZSeVjqq4f6&keytype=ref&siteid=healthaff.

Source: Andreyeva T, Chaloupka FJ, Brownell KD. "Estimating the Potential of Taxes on Sugar-Sweetened Beverages to Reduce Consumption and Generate Revenue." *Preventive Medicine,* 52(6): 413–6, 2011.

The Legislature further finds that in order to reverse the obesity epidemic, it is important that our citizens have access to programs and services that promote a healthy lifestyle. In addition to treatment, every adult and child must have access to coverage for preventive medical services, including nutrition and obesity counseling and screening for obesity-related diseases such as type 2 diabetes. It is equally important to increase the number of programs available in communities, schools, and childcare settings that help make nutritious foods more affordable and accessible and provide safe and healthy places for people to engage in physical activity. Providing a dedicated source of funding for these programs is vital to their success.

COMMENT: For the discussion of the importance of creating a dedicated source of revenues for public health prevention, see: Trust for America's Health. *F as in Fat: How Obesity Policies are Failing in America*. 2009, section 7. Available at: www.healthyamericans.org/reports/obesity2009/Obesity2009Report.pdf.

Many states have reduced or eliminated funding for the services mentioned in this finding. Local statistics illustrating this will strengthen this finding and support earmarking the proceeds of the tax.

It is the intent of the Legislature, by adopting the Sugar-Sweetened Beverages Tax Law and creating the Children's Health Promotion Fund, to diminish the human and economic costs of obesity in the State of [_____]. This Act is intended to discourage excessive consumption of sugar-sweetened beverages and to create a dedicated revenue source for programs designed to prevent and treat childhood obesity and reduce the burden of resulting health conditions.

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Model Sugar-Sweetened Beverage Tax Legislation

Developed by the National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN), a ChangeLab Solution

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June 2011 (updated August 2012)

Introduction and Report

This Model Sugar-Sweetened Beverage Tax Legislation is based on our legal research and analysis, as well as the research and evidence base linking consumption of sugar-sweetened beverages and overweight/obesity. It is intended to be used as one potential policy intervention designed to reduce the consumption of sugar-sweetened beverages and to raise funds that can be dedicated to public health prevention and treatment programs.

This Introduction and Report summarizes our nonpartisan analysis, study, and research on the contribution of sugar-sweetened beverages to the obesity epidemic, and the rationale for a dedicated tax as an effective policy intervention. It is intended for broad distribution to the public. Our presentation of this model legislation, including this Introduction and Report, is based on our independent and objective analysis of the relevant law, evidence, and available data, and should enable readers to draw their own opinions and conclusions about the merits of this sample legislation.

Childhood Obesity Epidemic

Childhood obesity rates in the United States have risen dramatically over the past 30 years, particularly among low-income communities and communities of color. Today almost one-third of American children are obese or overweight.[1] Across the nation, children have easy

[1] Ogden CL, Carroll MD, Curtin LR, et al. "Prevalence of High Body Mass Index in US Children and Adolescents, 2007–2008." *Journal of the American Medical Association,* 303(3): 242–249, 2010. Available at: www.jama.ama-assn.org/content/303/3/242.full.

access to non-nutritious foods and do not get enough exercise. All other things being equal, a small, persistent energy imbalance of as little as 50 calories per day can result in up to a 5-pound weight gain over the course of a year.[2]

Overweight children are at increased risk for serious health problems in adulthood such as heart disease, type 2 diabetes, asthma, and cancer.[3] A recent study among youth with type 1 diabetes found that increased consumption of sugar-sweetened beverages was associated with increased risk of coronary heart disease.[4] Today's young people may be the first generation in the history of the United States to live sicker and die younger than their parents' generation.[5]

Preventing the current generation of young people from developing these health conditions can not only improve Americans' quality of life but also save federal, state, and local governments billions of dollars in health care costs and lost productivity. The costs of obesity are rising rapidly and are estimated to be as high as $147 billion per year.[6] Moreover, in the United States roughly one-half of these costs are paid by Medicare and Medicaid, which suggests that taxpayers foot the bill for much of the costs of obesity.[7] Medicare and Medicaid spending would be 8.5 percent and 11.8 percent lower, respectively, in the absence of obesity-related spending.[8]

The Role of Sugar-Sweetened Beverages

Sugar-sweetened beverages,[9] such as non-diet soda, sports drinks, energy drinks, and sweet

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[2] Kumanyika SK, Obarzanek E, Stettler N, et al. "Population-Based Prevention of Obesity: The Need for Comprehensive Promotion of Healthful Eating, Physical Activity, and Energy Balance: A Scientific Statement from American Heart Association Council on Epidemiology and Prevention, Interdisciplinary Committee for Prevention (formerly the Expert Panel on Population and Prevention Science)." *Circulation*, 118: 428–464, 2008. Available at: http://circ.ahajournals.org/cgi/content/full/118/4/428.

[3] US Department of Health and Human Services, Office of the Surgeon General. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. 2007. Available at: http://surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm; Food and Nutrition Board and Board on Health Promotion and Disease Prevention. *Preventing Childhood Obesity: Health in the Balance*. The National Academic Press, 2005, p. 332. Available at: http://books.nap.edu/openbook.php?record_id=11015&page=332.

[4] Bortsov AV, Liese AD, Bell RA, et al. "Sugar-Sweetened and Diet Beverage Consumption Is Associated with Cardiovascular Risk Factor Profile in Youth with Type 1 Diabetes." *Acta Diabetologica*, [Electronic publication ahead of print] 2011.

[5] Olshansky SJ, Passaro DJ, Hershow RC, et al. "A Potential Decline in Life Expectancy in the United States in the 21st Century." *New England Journal of Medicine*, 352(11): 1138–1145, 2005.

[6] Finkelstein EA, Trogdon JG, Cohen JW, et al. "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates." *Health Affairs*, 28(5): w822–w831, 2009. Available at: http://obesity.procon.org/sourcefiles/FinkelsteinAnnualMedicalSpending.pdf.

[7] Finkelstein EA, Trogdon JG, Cohen JW, et al. "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates." *Health Affairs*, 28(5): w822–w831, 2009. Available at: http://obesity.procon.org/sourcefiles/FinkelsteinAnnualMedicalSpending.pdf.

[8] Finkelstein EA, Trogdon JG, Cohen JW, et al. "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates." *Health Affairs*, 28(5): w822–w831, 2009. Available at: http://obesity.procon.org/sourcefiles/FinkelsteinAnnualMedicalSpending.pdf.

[9] Sugar-sweetened beverages (SSBs) include all sodas, fruit drinks, sport drinks, low-calorie drinks and other beverages that contain added caloric sweeteners, such as sweetened tea, rice drinks, bean beverages, sugar cane beverages, horchata and nonalcoholic wines/malt beverages. For a more comprehensive list of sugar-sweetened beverages, refer to the November 2009, Research Synthesis by Healthy Eating Research, *The Negative Impact of Sugar-Sweetened Beverages*

teas, account for the growing proportion of calories consumed by children.[10] These sugar-sweetened beverages (SSBs) offer little or no nutritional value, but contain massive quantities of sugar.[11] Sugar in liquid form accounts for almost half the total added-sugar intake in the U.S. population, and sweetened beverages displace healthier, more nutrient-dense beverages like milk, 100% fruit juice, and water.[12] Soft drinks now contribute more added sugars to the diet than any other single type of food or beverage.[13] Children are consuming 10 to 15 percent of their daily caloric intake from sugar-sweetened beverages, and many times the recommended amount of refined sugar per day as a result.[14] Additionally, Americans who are at greatest risk for obesity, including African-Americans, Mexican-Americans, and lower education and income populations, have the highest intake of sugar-sweetened beverages.[15]

Numerous scientific studies demonstrate the link between consumption of sugar-sweetened beverages and obesity.[16,17,18,19] A recent meta-analysis examining 88 cross-sectional and prospective studies that explored the relationship between soft drink intake and nutrition or health outcomes found that higher intake of soft drinks was associated with greater energy intake, higher body weight, lower intake of other nutrients, and worse health outcomes.[20] Subsequent analyses from a large trial confirmed these findings, namely, greater weight loss as sugar-sweetened beverage intake decreased.[21] Additionally, consumption of sugar-

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on Children's Health. Available at: www.healthyeatingresearch.org/images/stories/her_research_briefs/her_ssb_synthesis_091116.pdf.

[10] Troiano RP, Briefel RR, Carroll MD, et al. "Energy and Fat Intakes of Children and Adolescents in the United States: Data from the National Health and Nutrition Examination Surveys" *American Journal of Clinical Nutrition*, 72(suppl): 1343S–53S, 2000. Available at: www.ajcn.org/content/72/5/1343S.full.pdf+html.

[11] Jacobson MF. *Liquid Candy: How Soft Drinks Are Harming Americans' Health*. Washington, DC: Center for Science in the Public Interest, 2005. Available at: www.cspinet.org/new/pdf/liquid_candy_final_w_new_supplement.pdf.

[12] Woodward-Lopez G, Kao J, Ritchie L. "To What Extent Have Sweetened Beverages Contributed to the Obesity Epidemic?" *Public Health Nutrition,* [Electronic publication ahead of print]. September 23, 2010. Available at: www.foodpolitics.com/wp-content/uploads/Woodward-Impact-of-SSBs.PubHlthNutr-2011.pdf.

[13] Johnson RK, Appel LJ, Brands M, et al. on behalf of the American Heart Association Nutrition Committee of the Council on Nutrition, Physical Activity and Metabolism and the Council on Epidemiology and Prevention. "Dietary Sugars Intake and Cardiovascular Health: A Scientific Statement from the American Heart Association." *Circulation,* 120: 1011–1020, 2009. Available at: http://circ.ahajournals.org/cgi/content/full/120/11/1011?ijkey=856cda3d8f34ccf7dff9a00a20598d22a58b115a.

[14] Brownell KD, Farley T, Willett WC, et al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages." *New England Journal of Medicine,* 361(16): 1599–1605, 2009. Available at: www.yaleruddcenter.org/resources/upload/docs/what/policy/BenefitsSodaTaxNEJM9.09.pdf.

[15] Bleich SN, Wang CY, Wang Y, et al. "Increasing the Consumption of Sugar-Sweetened Beverages among US Adults: 1988–1994 to 1999–2004." *American Journal of Clinical Nutrition,* 89(1): 372–381, 2009.

[16] Bachman CM, Baranowski T, and Nicklas TA. "Is There an Association between Sweetened Beverages and Adiposity?" *Nutrition Reviews*, 64(4): 153–174, 2006.

[17] Malik VS, Schulze MB, and Hu FB. "Intake of Sugar-Sweetened Beverages and Weight Gain: A Systematic Review." *American Journal of Clinical Nutrition*, 84(2): 274–288, 2006.

[18] Johnson L, Mander AP, Jones LR, et al. "Is Sugar-Sweetened Beverage Consumption Associated with Increased Fatness in Children?" *Nutrition*, 23: 557–563, 2007.

[19] Palmer JR, Boggs DA, Krishnan S, et al. "Sugar-Sweetened Beverages and Incidence of Type 2 Diabetes Mellitus in African American Women." *Archives of Internal Medicine*, 165(14): 1487–1492, 2008

[20] Vartanian LR, Schwartz MB, and Brownell KD. "Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis." *American Journal of Public Health*, 97(4): 667–675, 2007.

[21] Chen L, Appel LJ, Loria C, et al. "Reduction in Consumption of Sugar-Sweetened Beverages is Associated with Weight Loss: The PREMIER Trial. " *American Journal of Clinical Nutrition,* 89(5): 1299–1306, 2009.

sweetened beverages has been linked with an increase in blood pressure.[22] Research has also shown that reducing sugar-sweetened beverage consumption by one serving per day is associated with a drop in blood pressure.[23]

[22] Brown IJ, Stamler J, Van Horn L, et al. "Sugar-Sweetened Beverage, Sugar Intake of Individuals, and Their Blood Pressure: International Study of Macro/Micronutrients and Blood Pressure." *Hypertension*, 57(4): 695–701, 2011.

[23] Chen L, Caballero B, Mitchell DC, et al. "Reducing Consumption of Sugar-Sweetened Beverages Is Associated with Reduced Blood Pressure: A Prospective Study Among United States Adults." *Circulation*, 121(22): 2398–2406, 2010.

Industry-sponsored Studies and Response

There is no doubt that many factors have contributed to the obesity epidemic, and some experts argue that the evidence base linking sugar-sweetened beverages to obesity and other chronic disease is not strong enough to warrant policy intervention. In a response to an October 2009 policy report supporting SSB taxes in the *New England Journal of Medicine* by several public health luminaries, Dr. Michael Kaplan of Maimonides Medical Center in New York wrote a letter to the editor of the journal noting several flaws in the studies cited by the policy report authors as the evidence base for SSB taxes.[24] Commenting on a 2011 study linking SSB consumption to hypertension, Dr. Maureen Storey, senior vice president of science policy for the American Beverage Association, stated, "This cross-sectional epidemiological study does not and cannot establish that drinking sugar-sweetened beverages in any way causes hypertension."[25]

One industry-funded meta-analysis of studies involving children concluded that no evidence of an association between consumption of sugar-sweetened beverages and body weight exists.[26] In another intervention study to reduce sugar-sweetened beverage consumption among adolescents, there was no significant change in body mass index between adolescents who reduced their SSB intake and those who did not.[27] However, both of these studies were funded by the beverage industry, and the overwhelming body of independent evidence demonstrates a very strong link between sugar-sweetened beverages and obesity.

Taxing Sugar-Sweetened Beverages to Combat the Obesity Epidemic

Just as there are many factors contributing to the obesity epidemic, there are many potential policy interventions to reduce the prevalence and overconsumption of SSBs. A multifaceted combination of programmatic and policy approaches will be necessary to reverse the epidemic.[28] Complementary policy approaches should also be pursued, to remove sugar-sweetened beverages from schools and to reduce the prevalence of marketing of sugar-sweetened beverages to children. In addition, governments can control the types of goods, including beverages, that are purchased with government funds and sold on government property. All policy interventions should be considered.

Implementing a Sugar-Sweetened Beverage Tax and creating a Children's Health Promotion

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[24] Kaplan MG. "Taxing Sugar-Sweetened Beverages." (Letter to the Editor). *New England Journal of Medicine*, 362: 368–369, 2010. Available at: www.nejm.org/doi/full/10.1056/NEJMc0911234.

[25] Storey M. "American Beverage Association Statement on Sugar-Sweetened Beverages and Blood Pressure." (Press Release). February 28, 2011. Available at: www.ameribev.org/news--media/news-releases--statements/more/239/.

[26] Forshee RA, Anderson PA, and Storey ML. "Sugar-Sweetened Beverages and Body Mass Index in Children and Adolescents: a Meta-Analysis." *American Journal of Clinical Nutrition*, 87: 1662–1671, 2008. Available at: www.ajcn.org/content/87/6/1662.full.pdf+html.

[27] Ebbeling CB, Feldman HA, Osganian SK, et al. "Effects of Decreasing Sugar-Sweetened Beverage Consumption on Body Weight in Adolescents: A Randomized, Controlled Pilot Study." *Pediatrics*, 117: 673–680, 2006.

[28] Finkelstein EA, Ruhm CJ, and Kosa KM. "Economic causes and consequences of obesity." *Annual Review of Public Health*, 26: 239–257, 2005.

Fund, however, can be a particularly effective tool for reducing the human and economic costs of obesity. There are numerous studies showing that a price increase for sugar-sweetened beverages can dramatically reduce consumption and overall caloric intake if there is no beverage substitution.[29] Some opponents of SSB taxes cite studies indicating that taxes are problematic and may not reduce consumption in part because it is difficult to forecast whether high-calorie beverages would be substituted (such as 100% juice or whole milk), and because governments may decide not to dedicate the proceeds to obesity-related programs and services.[30] It is difficult to say exactly how consumer behavior will change with a sugar-sweetened beverage tax, which is why evaluation of successful tax legislation is needed. Further, earmarking language in SSB tax legislation will ensure that the revenue is dedicated to public health policies and programs that reduce obesity rates.

The model legislation addresses both of these issues. It includes language requiring a meaningful evaluation of the effect of the tax on consumer purchasing and health outcomes. The results of the evaluation can be used to adjust the tax to ensure the maximum public health benefit. In addition, this model legislation earmarks all of the tax proceeds for public health prevention and treatment programs. Following the recommendations in the model legislation guarantees a public health benefit through effective earmarking of proceeds, and significantly increases the likelihood that consumption will be reduced.

One argument opponents of a SSB tax often raise is that the tax is regressive (the same argument that was often made in opposition to tobacco excise taxes). Like any tax that is not levied in proportion to the income level of the taxpayer, a SSB tax is technically regressive. As noted above, however, low-income populations and communities of color are disproportionately affected by overweight, obesity, and resulting health conditions.[31] This Model Sugar-Sweetened Beverage Tax Legislation addresses those inequities by providing that tax proceeds be directed back into the communities that are disproportionately affected by overweight and obesity.

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[29] *See, e.g.,* Andreyeva, T, Chaloupka, FJ, Brownell, KD. "Estimating the Potential of Taxes on Sugar-Sweetened Beverages to Reduce Consumption and Generate Revenue. *Preventive Medicine* (in press 2011); Finkelstein, EA, Zhen, C, Nonnemaker J, et al. "Impact of Targeted Beverage Taxes on Higher- and Lower-Income Households." *Archives of Internal Medicine*, 170(22): 2028–2034, 2010.

[30] Williams R and Christ K, *Mercatus on Policy No. 52: Taxing Sin*. Fairfax, VA: Mercatus Center at George Mason University, 2009. Available at: http://mercatus.org/sites/default/files/publication/MOP55%20_Taxing%20Sin_web_fixed.pdf.

[31] Bleich SN, Wang CY, Wang Y, et al. "Increasing the Consumption of Sugar-Sweetened Beverages among US Adults: 1988–1994 to 1999–2004." *American Journal of Clinical Nutrition,* 89(1): 372–381, 2009; Cullen KW, Ash DM, Warneke C, et al. "Intake of Soft Drinks, Fruit-Flavored Beverages, and Fruits and Vegetables by Children in Grades 4 Through 6." *American Journal of Public Health*, 92(9): 1475 –1477, 2002.

Conclusion

A substantial tax on sugar-sweetened beverages, with proceeds dedicated to public health programs, is a very promising policy intervention that complements other interventions to reduce the consumption of sugary drinks and to combat the health conditions that result from consumption of those beverages.

Opponents make several arguments against such a tax, based on the issues set forth above and also on speculation that the tax would hurt businesses or cause job losses, or would not have the desired effect. The evidence suggests otherwise: sugar-sweetened beverages are a major contributor to the obesity epidemic, and a tax will raise funds to combat the epidemic, in addition to also potentially reducing consumption. While a tax should be considered in combination with a variety of other programmatic and policy interventions, a tax can be uniquely effective.

AN ACT TO ASSESS A TAX ON SUGAR-SWEETENED BEVERAGES, SYRUPS, AND POWDERS; TO CREATE A SPECIAL FUND FOR PROMOTION OF CHILDREN'S HEALTH AND PREVENTION OF CHILDHOOD OBESITY

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF [_____]:

SECTION ONE. See APPENDIX A: Findings

COMMENT: A draft statute based on this model legislation should include "findings" of fact that support the purposes of the legislation. The findings section is part of the statute and legislative record, but it usually does not become codified in the state codes. The findings contain factual information supporting the need for the law – in this case, documenting the potential benefits of a tax on sugar-sweetened beverages with the proceeds dedicated for public health programs. A list of findings supporting this model legislation appears in "Appendix A: Findings." States may select findings from that list to insert here, along with additional findings addressing the specific conditions in the particular state.

SECTION TWO. [*State Code*] is hereby amended by adding thereto a new chapter to read as follows:

CHAPTER [__]

SUGAR-SWEETENED BEVERAGES TAX

§__-1. Title of chapter. This chapter may be cited as the Sugar-Sweetened Beverages Tax Law.

§__-2. Legislative intent.
It is the intent of the Legislature, by adopting the Sugar-Sweetened Beverages Tax Law and creating the Children's Health Promotion Fund, to diminish the human and economic costs of obesity in the State of [_____]. This chapter is intended to discourage excessive consumption of Sugar-Sweetened Beverages and to create a dedicated revenue source for programs designed to prevent and treat childhood obesity and health conditions which result from it.

§__-3. Definitions. For purposes of this chapter:

(a) "Bottle" means any closed or sealed container regardless of size or shape, including, without limitation, those made of glass, metal, paper or plastic or any other material or combination of materials.

(b) "Bottled Sugar-Sweetened Beverage" means any Sugar-Sweetened Beverage contained in a Bottle that is ready for consumption without further processing such as, without limitation, dilution or carbonation.

(c) "Caloric Sweetener" means any caloric substance suitable for human consumption that humans perceive as sweet and includes, without limitation, sucrose, fructose, glucose, other sugars, and fruit juice concentrates. "Caloric Sweetener" excludes Non-Caloric Sweeteners. For purposes of this definition, "caloric" means a substance which adds calories to the diet of a person who consumes that substance.

(d) "Consumer" means a person who purchases a Sugar-Sweetened Beverage for consumption and not for Sale to another.

(e) "Department" means the State Department of [_____].

COMMENT: This definition should identify the state department or agency which is responsible for administration and collection of state taxes.

(f) "Distributor" means any Person, including manufacturers and wholesale dealers, who receives, stores, manufactures, bottles or distributes Bottled Sugar-Sweetened Beverages, Syrup, or Powder, for Sale to Retailers doing business in the State whether or not that Person also sells such products to Consumers.

(g) "Fund" means the Children's Health Promotion Fund established pursuant to Section [__-___].

(h) "Non-Caloric Sweetener" means any non-caloric substance suitable for human consumption that humans perceive as sweet and includes, without limitation, aspartame, saccharin, stevia, and sucralose. "Non-Caloric Sweetener" excludes Caloric Sweeteners. For purposes of this definition, "non-caloric" means a substance that contains fewer than 5 calories per serving.

COMMENT: The Food and Drug Administration (FDA) regulates the use of terms like "no-calorie" or "calorie free" as nutrient content claims. This definition of "non-caloric" aligns with the FDA's definition. 21 C.F.R. 101.60. See discussion of calorie content claims in section 101.60 of the following: www.access.gpo.gov/nara/cfr/waisidx_08/21cfr101_08.html

(i) "Person" means any natural person, partnership, cooperative association, limited liability company, corporation, personal representative, receiver, trustee, assignee, or any other legal entity.

(j) "Place of Business" means any place where Sugar-Sweetened Beverages, Syrups, or Powder are manufactured or received for Sale in the State.

(k) "Powder" means any solid mixture of ingredients that contains Caloric Sweetener, which is used in making, mixing or compounding Sugar-Sweetened Beverages by combining the Powder with any one or more other ingredients, including without limitation water, ice, Syrup, simple syrup, fruits, vegetables, fruit juice, vegetable juice, carbonation or other gas.

(l) "Retailer" means any Person who sells or otherwise dispenses in the State a Sugar-Sweetened Beverage to a Consumer whether or not that Person is also a Distributor as defined in this section.

(m) "Sale" means the transfer of title or possession for valuable consideration regardless of the manner by which the transfer is completed.

(n) "State" shall mean the State of [_____].

(o) (1) "Sugar-Sweetened Beverage" means any nonalcoholic beverage, carbonated or noncarbonated, which is intended for human consumption and contains any added Caloric Sweetener. As used in this definition, "nonalcoholic beverage" means any beverage that contains less than one-half of one percent alcohol per volume.

COMMENT ON DEFINITION OF SUGAR SWEETENED BEVERAGE: This definition is intended to be very broad and include all beverages with any amount of added caloric sweetener. Some jurisdictions, for political or policy reasons, may want to exempt low-calorie beverages despite the fact that they contain added caloric sweetener, because they are seen as healthier alternatives to higher calorie beverages. If your jurisdiction would like to exempt lower calorie beverages from the tax, you can include the optional exemption language below (subparagraph (o)(2)(D)) and establish a threshold amount of added caloric sweetener to qualify for the exemption. Which option to include is a policy choice for your jurisdiction.

For a comprehensive list of the types of beverages that are captured by this definition, refer to the November 2009 Research Synthesis by Healthy Eating Research, *The Negative Impact of Sugar-Sweetened Beverages on Children's*

Health. Available at: www.healthyeatingresearch.org/images/stories/her_research_briefs/her_ssb_synthesis_091116.pdf.

Note that this definition only applies to nonalcoholic beverages, which is also defined; as an alternative to this definition, the term "nonalcoholic beverage" could be defined to mean those beverages that are not subject to taxation under the State's alcoholic beverage tax, if applicable.

Subparagraph (2) lists some beverages that are exempt from the tax. Which beverages to exclude from the tax is a policy decision; this list of exemptions can be modified at the discretion of the policymakers and public health professionals in your state.

Note that the default definition of "sugar-sweetened beverage" includes all beverages with any amount of added caloric sweetener; it is not necessary to specifically exempt any beverage unless the exempted beverage contains added caloric sweetener. For example, if you would like to exempt flavored milk from the tax, you would need to include language to effectuate that exemption. On the other hand, plain water, coffee, or tea with no added caloric sweetener would not need to be included on the exemption list.

(2) Notwithstanding paragraph (1), the term "Sugar-Sweetened Beverage" does not include:

(A) Beverages consisting of [100] percent natural fruit or vegetable juice with no added Caloric Sweetener. For purposes of this paragraph, "natural fruit juice" and "natural vegetable juice" mean the original liquid resulting from the pressing of fruits or vegetables, or the liquid resulting from the dilution of dehydrated natural fruit juice or natural vegetable juice;

COMMENT: The percentage of natural juice required to exempt beverages from taxation is a matter of policy. Jurisdictions should note the following when deciding whether to exempt diluted juice beverages:

* Many diluted juice beverages do not contain any vitamins or minerals that would make the beverage healthier. These beverages use the juice as a caloric sweetener.

* Diluted juice beverages may contain added caloric sweetener, in addition to water and other ingredients. If some diluted beverages are exempt, jurisdictions should carefully consider whether diluted juice beverages with caloric sweetener should be taxed.

See FDA discussion of "juice" requirements in the context of food labeling. 21 C.F.R. 101.30. See part 101.30 of the following: www.access.gpo.gov/nara/cfr/waisidx_08/21cfr101_08.html.

If you exempt diluted fruit juice from the tax, please note that several other sections of this model legislation might be affected, and should be amended accordingly (i.e., you might also consider excluding "'fruit juice concentrate" from the definition of "caloric sweetener.")

(B) Dietary aids, which means liquid products manufactured for use as:

(1) An oral nutritional therapy for persons who cannot absorb or metabolize dietary nutrients from food or beverages;

(2) A source of necessary nutrition used due to a medical condition; or

(3) An oral electrolyte solution for infants and children formulated to prevent dehydration due to illness; and

(C) Infant formula. [; and]

[(D) Beverages containing less than [4.2 grams] of added Caloric Sweetener per eight (8) ounces of beverage.]

COMMENT: The optional language in subparagraph (D) would exempt from the tax beverages containing less than a threshold amount of added caloric sweetener. The threshold amount used in this model, 4.2 grams of added caloric sweetener per 8 ounces, is intended to be the equivalent of one teaspoon of white granular sugar per 8 ounces. If you decide to use this exemption, the exact threshold amount is a policy decision for your jurisdiction.

Exempting Milk with Added Caloric Sweetener

Some jurisdictions may wish to exempt milk with added caloric sweetener, such as chocolate or strawberry milk. Many public schools serve these milks to students as part of the National School Lunch program. Under the Healthy, Hunger-Free Kids Act of 2010, the U.S. Department of Agriculture (USDA) updated the meal patterns and nutrition standards for the National School Lunch and School Breakfast Programs, including the fluid milk requirements. The USDA requires school to offer unflavored or flavored fat-free milk and unflavored low-fat (1 percent milk fat or less). See Section 201 of the Healthy, Hunger-Free Kids Act of 2010 (Pub. L. 111–296, HHFKA) 2010. Available at: www.fns.usda.gov/cnd/governance/legislation/CNR_2010.htm. Some

states and municipalities want to exempt these milks from the SSB tax in order to be in line with school policies or for other reasons.

The public health community is divided over whether flavored milk has a net positive impact on health. Research funded by the dairy industry suggests that flavored milk consumption among children is associated with greater calcium intake and lower consumption of other sugar-sweetened beverages, as compared with children who do not drink flavored milk.[1] On the other hand, the Institute of Medicine recently found that most Americans, except girls between the ages 9-18, obtain sufficient calcium and vitamin D (both found in milk) from their diets. This same IOM study indicated that more calcium and vitamin D consumption is not necessarily better and cautioned against over-consumption of the nutrients.[2] This guidance, combined with a growing concern about overconsumption of added sugars and calories, leads some in the public health community to argue against encouraging flavored milk consumption, especially among children.

Flavored milks are sugar-sweetened beverages, which are as a whole linked to weight gain and chronic disease. Due to the lack of independent research clearly demonstrating a net positive health impact of flavored milk consumption, this model treats flavored milk as a sugar-sweetened beverage that is subject to the tax. As a matter of policy, you may wish to include an exemption for flavored milk.

[1] Johnson RK, Frary C, and Wang MQ. "The Nutritional Consequences of Flavored-Milk Consumption by School-Aged Children and Adolescents in the United States." *Journal of the American Dietetic Association*, 102(6): 853–856, 2002.

[2] Institute of Medicine, Food and Nutrition Board. *Dietary Reference Intakes: Calcium, Vitamin D*. Washington DC: National Academies Press, 2010.

(p) "Syrup" means a liquid mixture of ingredients that contains Caloric Sweetener, which is used in making, mixing, or compounding Sugar-Sweetened Beverages by combining the Syrup with one or more other ingredients including, without limitation, water, ice, a Powder, simple syrup, fruits, vegetables, fruit juice, or vegetable juice carbonation or other gas.

(q) "Tax Administrator" means the [*State Tax Administrator*] within the Department of [_____] and his authorized agents and employees.

COMMENT: This definition should refer to the head of the agency that is responsible for taxation in your state. It is important to identify that person in the text of the legislation, because that person and the agency should be given specific authority to promulgate rules and regulations to effectuate and administer the tax.

§__-4. Permit required.

(a) Every Distributor doing business in the State shall file with the Tax Administrator an application for a permit to engage in such business, for each Place of Business owned and operated by the Distributor before the sooner of [effective date] or a Distributor's first acts which constitute the doing of business in the State. An application for a permit shall be filed on forms to be furnished by the Tax Administrator for that purpose. An application must be subscribed and sworn to by a person with legal authority to bind the business. The application shall identify the owners of the applicant, the applicant's mailing address, the Place of Business to which the permit shall apply, and the nature of the business in which engaged, and any other information the Tax Administrator may require for the enforcement of this chapter.

(b) Upon receipt of an application and any permit fee hereafter provided for, the Tax Administrator may issue to the applicant, for the Place of Business designated, a nonassignable permit, authorizing the sale of Sugar-Sweetened Beverages, Syrups, and Powder in the State. No Distributor shall sell any Sugar-Sweetened Beverage, Syrup or Powder without first obtaining a permit to do so under this chapter. Permits issued pursuant to this section shall expire on January 31 of each year and may be renewed annually.

(c) A permit cannot be transferred from one Person to another, and a permit shall at all times be prominently displayed in a Distributor's Place of Business. The Tax Administrator may refuse to issue a permit to any Person previously convicted of violations of this chapter under such procedures as the Tax Administrator may establish by regulation.

COMMENT: Requiring businesses subject to the tax to obtain a permit can assist in efficient administration of the tax, by enabling the Tax Administrator to more easily identify and track these businesses. Whether to include a permitting scheme, and how the permit scheme should be designed and implemented, is a policy matter and depends on the structure of the law in your jurisdiction. This tax can also be implemented without issuing permits.

§__-5. Tax imposed.

OPTION 1: TAX PER OUNCE OF BEVERAGE

(a) There is hereby imposed an excise tax on every Distributor for the privilege of selling the products governed by this chapter in the State, calculated as follows:

(1) [One dollar twenty-eight cents ($1.28) per gallon] / [one cent ($0.01) per ounce] of Bottled Sugar-Sweetened Beverages sold or offered for Sale to a Retailer for Sale in the State to a Consumer;

(2) The tax on Syrup and Powder sold or offered for Sale to a Retailer for Sale in the State to a Consumer, either as Syrup or Powder or as a Sugar-Sweetened Beverage derived from that Syrup or Powder, is equal to [One dollar twenty-eight cents ($1.28) per gallon] / [one cent ($0.01) per ounce] of Sugar-Sweetened Beverage produced from that Syrup or Powder. For purposes of calculating the tax, the volume of Sugar-Sweetened Beverage produced from Syrup or Powder shall be the larger of (i) the largest volume resulting from use of the Syrup or Power according to any manufacturer's instructions, or (ii) the volume actually produced by the Retailer, as reasonably determined by the Tax Administrator;

(3) The tax amounts set forth in this section shall be adjusted annually by the Tax Administrator in proportion with the Consumer Price Index: All Urban Consumers for All Items for the [region] Statistical Area as reported by the United States Bureau of Labor Statistics or any successor to that index.

OPTION 2: TAX PER TEASPOON OF ADDED CALORIC SWEETENER

(a) There is hereby imposed an excise tax on every Distributor for the privilege of selling the products governed by this chapter in the State, at the rate of [one cent ($0.01)] per teaspoon of added Caloric Sweetener in a Bottled Sugar-Sweetened Beverage, Syrup or Powder sold or offered for Sale to a Retailer in the State. For purposes of this Act, one teaspoon of Caloric Sweetener shall be deemed to equal [4.2] grams. The tax amounts set forth in this section shall be adjusted annually by the Tax Administrator in proportion with the Consumer Price Index: All Urban Consumers for All Items for the [region] Statistical Area as reported by the United States Bureau of Labor Statistics or any successor to that index.

COMMENT ON IMPOSITION OF TAX: The amount of the tax is a policy decision for legislators. This draft includes two alternative methods for calculating the tax: a tax per ounce of bottled sugar-sweetened beverage sold (or made from syrup or powder), and a tax based on the exact amount of sugar in a beverage, syrup or powder. Include the appropriate language in subsection (a) for whichever method you want to include. Both

methods have advantages, and which method to choose is a policy decision for your jurisdiction.

For more information on a tax of one cent per ounce, see: Brownell KD and Frieden TR. "Ounces of Prevention: The Public Policy Case for Taxes on Sugared Beverages." *New England Journal of Medicine*, 360: 1805–1808, 2009; and Brownell KD, Farley T, Willett WC, et al. "The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages." *New England Journal of Medicine*, 361: 1599–1605, 2009.

Basing the tax on the amount of added caloric sweetener more accurately reflects the association between the beverage, syrup or powder and weight gain. In addition, a tax based on amount of added sugar may be easier for some tax agencies to calculate for syrups and powders than a "per ounce" tax, which would be based on the volume of sugar-sweetened beverages produced from the syrups or powder

The tax is imposed on distributors, based on volume of sales of sugar-sweetened beverages to retailers in the state. The business paying the tax will determine whether to pass the tax on to retailers (and ultimately to consumers) through an increase in the price of the beverages.

Cigarette excise taxes are commonly included in the shelf price of cigarettes. This is largely due to industry practice, though several states' cigarette excise tax laws require that the tax be passed on to the consumer. Depending on the laws of your state, it may be possible to include a similar requirement for sugar-sweetened beverage taxes. If you would like to require that the tax be passed through to the consumer, and it is legal in your state to do so, you can include the following language in this section:

A Distributor shall add the amount of taxes levied by this Act to the price of sugar-sweetened beverages sold to a Retailer, and the Retailer shall pass the amount of the tax through to a Consumer as a component of the final retail purchase price. The amount of the taxes may be stated separately on all invoices, signs, sales or delivery slips, bills and statements that advertise or indicate the price of such beverages.

A tax calculator prepared by the Rudd Center for Food Policy and Obesity at Yale University can assist in calculating the amount of tax revenue that will result for any given tax amount, based on sales in your state. Available at: www.yaleruddcenter.org/sodatax.aspx.

(b) A Retailer which sells Bottled Sugar-Sweetened Beverages, Syrup, or Powder in the State to a Consumer, on which the tax imposed by this section has not been paid by a Distributor, is liable for the tax imposed in subsection (a) at the time of Sale to a Consumer.

COMMENT: This subsection applies when a Retailer purchases inventory on which tax has not been paid; in these cases, the Retailer is liable for the tax rather than the Distributor.

This subsection will also apply if the Retailer and the Distributor are the same business. This makes the Retailer a guarantor of the tax and will likely lead to a practice by which Retailers require proof of tax payment by Distributors at the time of sale. It may be useful to create, perhaps by regulation, a system for applying tax stamps as evidence of payment, as many states use to ensure payment of tobacco taxes.

(c) The taxes imposed by this section are in addition to any other taxes that may apply to Persons or products subject to this chapter.

§__-6. Report of sales and tax remittances.

(a) Any Distributor or Retailer liable for the tax imposed by this chapter shall, [*on or before the [15th] day of every month,*] [*on or before the last day of March, June, October and December of each year,*] return to the Tax Administrator under oath of a person with legal authority to bind the Distributor or Retailer, a statement containing its name and Place of Business, the quantity of Sugar-Sweetened Beverages, Syrup, and Powder subject to the excise tax imposed by this chapter sold or offered for sale in the [*preceding month*] [*three months immediately preceding the month in which the report is due*], and any other information required by the Tax Administrator, along with the tax due.

(b) The [*Treasurer of the State*] shall credit the proceeds of the tax to the Children's Health Promotion Fund.

§__-7. Records of Distributors.

Every Distributor, and every Retailer subject to this chapter, shall maintain for not less than [*two (2)*] years accurate records, showing all transactions that gave rise, or may have given rise, to tax liability under this chapter. Such records are subject to inspection by the Tax Administrator at all reasonable times during normal business hours.

§__-8. Establishment of Children's Health Promotion Fund.

(a) There is hereby created a trust fund in the State Treasury called the Children's Health Promotion Fund. All moneys collected pursuant to the taxes imposed by Section [__-__] and all interest on those moneys, shall be paid into the Children's Health Promotion Fund. All costs to implement this chapter shall be paid from the Children's Health Promotion Fund.

(b) It is the intent of the Legislature that this Act not be altered or amended to divert any portion of the proceeds of the tax imposed by this chapter away from the Children's Health Promotion Fund unless the [State] Legislature makes specific legislative

findings that the combined overweight and obesity rate for minors in the State of [_____], as defined by the Centers for Disease Control, is at least [50 percent] lower than the combined overweight and obesity rate for minors during the year this chapter was first enacted.

COMMENT ON EXISTING SPECIAL FUNDS: Some states already have established special funds, the proceeds of which are earmarked or dedicated to prevention and treatment of childhood obesity (or obesity generally). It is possible to direct the proceeds of the tax to an existing special fund for that purpose, rather than creating a new fund. If this approach is used, you must also decide whether to further earmark the proceeds of the sugar-sweetened beverage tax, or to allow those proceeds to be allocated pursuant to the established guidelines for the existing fund.

This section also includes language demonstrating a specific legislative intent to prevent future legislatures from diverting tax proceeds away from the special fund unless the combined overweight and obesity rate among children is significantly reduced. To help with this calculation, it is important to include legislative findings indicating the State's combined overweight and obesity rate for minors when this tax is first enacted.

The Centers for Disease Control and Prevention defines "overweight" for adolescents as a Body Mass Index (BMI) at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

A general legal tenet is that a sitting legislature cannot bind a future legislature (i.e., prohibit a future legislature from taking certain actions) except through a Constitutional amendment or other legislative action approved by the electorate. Some states may allow this practice, however, and in those states this provision can be strengthened beyond a statement of intent.

§__-9. Expenditure of Children's Health Promotion Fund.

(a) All moneys in the Children's Health Promotion Fund, after costs to implement this chapter have been deducted, shall be appropriated and allocated as follows:

(1) Twenty percent (20%) to the State [*Department of Health*] to coordinate evidenced-based statewide childhood obesity prevention activities and to fund state-level childhood obesity prevention programs. This funding shall support programs that use educational, environmental, policy, and other public health approaches that achieve the following goals: eliminate racial, ethnic, and socioeconomic disparities in childhood obesity rates; improve access to and consumption of healthy, safe, and affordable foods; reduce access to and consumption of calorie-dense, nutrient-poor foods; encourage physical activity; decrease sedentary behavior; and raise

awareness about the importance of nutrition and physical activity to childhood obesity prevention.

(2) Thirty-five percent (35%) for evidence-based community-based childhood obesity prevention programs. This funding shall support programs that use educational, environmental, policy, and other public health approaches that achieve the following goals: eliminate racial, ethnic, and socioeconomic disparities in childhood obesity rates; improve access to and consumption of healthy, safe, and affordable foods; reduce access to and consumption of calorie-dense, nutrient-poor foods; encourage physical activity; decrease sedentary behavior; and raise awareness about the importance of nutrition and physical activity to childhood obesity prevention. The State [*Director of Health*] shall be responsible for the distribution of these funds to community-based organizations and to local health departments, with priority given to low-income communities and communities of color that are most affected by the obesity epidemic.

(3) Ten percent (10%) to evidence-based prevention, early recognition, monitoring, and weight management intervention activities in the medical setting. The State [*Director of Health*] shall be responsible for identifying activities and allocating these funds.

(4) Thirty-five percent (35%) to elementary and secondary schools for educational, environmental, policy and other public health approaches that promote nutrition and physical activity. The approaches funded pursuant to this subsection can include improving or building school recreational facilities that are used for recess and physical education; providing continuing education training for physical education teachers; hiring qualified physical education teachers; implementing Safe Routes to Schools programs; improving the quality and nutrition of school breakfasts, lunches, and snacks; ensuring free, clean drinking water access throughout the school day; counteradvertising; and incorporating practical nutrition education into the curriculum. The State [*Superintendent of Education*] is responsible for the allocation and distribution of these funds.

COMMENT: Earmarking the proceeds of the tax serves an important public health purpose by dedicating funds for prevention programs to address the obesity epidemic. The earmarked amounts in this section, and

the programs for which the funds are earmarked, are examples that can have a positive public health impact. Your jurisdiction could identify other public health programs to receive funds as well, and could dedicate the funds in whatever percentages are appropriate for your community.

(b) All moneys in the Children's Health Promotion Fund shall be expended only for the purposes expressed in this chapter, and shall be used only to supplement existing levels of service and not to supplant current federal, state, or local funding for existing levels of service.

COMMENT: One option to ensure that funds are allocated consistent with these earmarking guidelines is to create an oversight committee to report back to the state legislature. The oversight committee could include representatives from state agencies, the public health community, and the general public.

(c) The [*Department of Health*] shall develop criteria and components for an independent evaluation to assess the impact that the tax imposed by this chapter has on consumption of products subject to the tax.
The evaluation shall seek to determine the impact of the tax on beverage prices, consumer purchasing behavior, and health outcomes. The reasonable costs of evaluation shall be considered an implementation cost of this chapter.

(d) The State [*Director of Health*] and the State [*Superintendent of Education*] are hereby empowered to make such rules and regulations, and provide such procedural measures, as shall bring into effect the purposes of this section. The rules and regulations may provide for specific programs to be funded consistent with the allocation of funds set forth above.

COMMENT: The agencies charged with allocating and administering these funds will likely need to promulgate administrative regulations to effectuate the purposes of this section. (Alternatively, the state legislature could enact more specific implementing legislation.) While this section provides general guidance regarding the types of organizations and programs that will receive funds, and also designates a state agency to administer those funds, the specific details of the allocations are not set forth in this model legislation. Leaving these provisions more general allows for greater flexibility as programs and recipients change.

§__-10. Exemptions.

The following shall be exempt from the tax imposed by section [__-__]:

(a) Bottled Sugar-Sweetened Beverages, Syrups, and Powder sold to the United States Government and American Indian Tribal Governments;

(b) Bottled Sugar-Sweetened Beverages, Syrups, and Powder sold by a Distributor or a Retailer expressly for resale or consumption outside the State; and

(c) Bottled Sugar-Sweetened Beverages, Syrups, and Powder sold by a Distributor to another Distributor that holds a permit issued pursuant to section [__-__], if the sales invoice clearly indicates that the sale is exempt. If the Sale is to a Person who is both a Distributor and a Retailer, the sale shall also be tax exempt and the tax shall be paid when the purchasing Distributor / Retailer resells the product to a Retailer or a Consumer. This exemption does not apply to any other sale to a Retailer.

§__-11. Penalties.

COMMENT: Penalties for violation of state tax laws vary from state to state. Penalties should be determined by the legislative body of your jurisdiction, in consultation with an attorney licensed in your jurisdiction to ensure consistency with existing law and administrative efficiency.

Penalties should apply for any violation of this chapter, including failure to pay tax, failure to keep records and allow inspections, and failure to obtain a required permit.

(a) Any Person subject to the provisions of this chapter who fails to pay the entire amount of tax imposed by this chapter by the date that payment is due, fails to submit a report or maintain records required by this chapter, does business in the State of without first obtaining a permit as required by this chapter, or violates any other provision of this chapter, or rules and regulations promulgated by the Tax Administrator for the enforcement of this chapter, shall be guilty of a misdemeanor and shall also be liable for the amount of the tax that may be due and a penalty equal to fifty percent (50%) of the tax due. The Tax Administrator, or his duly authorized representative, may determine the amount due in the event of any payment or underpayment that may come to his attention and demand payment of all such taxes and penalties. Interest shall accrue on non- or under-payment of tax at a rate of twelve percent (12%) per year from the date the tax was due until paid.

(b) All administrative provisions of the [*State Sales Tax Law / other applicable law specified*], including those which provide for the apportionment of economic activity

between that within the tax jurisdiction of the State and such activity outside that jurisdiction, which fix damages, penalties and interest for nonpayment of taxes and for noncompliance with the provisions of said chapter, and all other requirements and duties imposed upon taxpayers, shall apply to all Persons liable for taxes under the provisions of this chapter, and the Tax Administrator shall exercise all the power and authority and perform all the duties with respect to taxpayers under this chapter as are provided in the [*State Sales Tax Law / other applicable law*], except where there is conflict, then the provisions of this chapter shall control.

§__-12. Unpaid taxes a debt.

All taxes and penalties imposed under the provisions of this chapter remaining due and unpaid shall constitute a debt to the State, which may be collected from the person owing same by suit or otherwise.

§__-13. Records of Tax Administrator.

At the end of each [month/quarter], the state auditor shall check the books and records of the Tax Administrator and his accounts with any bank or banks, and shall verify the amounts collected pursuant to this chapter and paid into the Children's Health Promotion Fund. Any duty herein required of the state auditor may be performed by any duly trained clerk in his office, designated by the state auditor for that purpose.

§__-14. Exercise of powers and duties.

Whenever in this chapter any reference is made to any power or duty of the Tax Administrator, the reference is construed to mean that the power or duty shall be exercised by the Tax Administrator, under the supervision and direction of the [*State Director of Revenue*].

§__-15. Rules and regulations.

The Tax Administrator [and the *Department of Health*] [is/are] hereby empowered to make such rules and regulations, and provide such procedural measures, in cooperation with the state auditor, as may be reasonably necessary to accomplish the purposes of this chapter.

§__-16. Preservation of local authority. Nothing in this chapter shall preempt or prohibit adoption and implementation of any policy related to Sugar-sweetened Beverages, including taxation, by a municipal government or political subdivision of the State.

§__-17. Severability.

If any provision of this chapter, any rule or regulation made under this chapter, or the application of this chapter to any person or circumstance is held invalid by any court of competent jurisdiction, the remainder of the chapter, rule or regulation, and the application of the provision to other persons or circumstances shall not be affected. The invalidity of

any section or sections or parts of any section of this chapter shall not affect the validity of the remainder of the chapter.

SECTION THREE. This act shall take effect and be in force from and after [*date*].

American Heart Association | American Stroke Association

FACTS
Kicking the Habit
Raising Tobacco Excise Taxes

OVERVIEW

Cigarette smoking continues to be the leading cause of preventable disease and death in the United States claiming approximately 443,000 lives prematurely every year.[1] Smoking not only takes the lives of those who use tobacco, but also those who are exposed to second-hand smoke. Smokeless tobacco has been linked to greater incidence of fatal heart attacks and strokes.[2] The bottom line -- no tobacco product is safe to use.

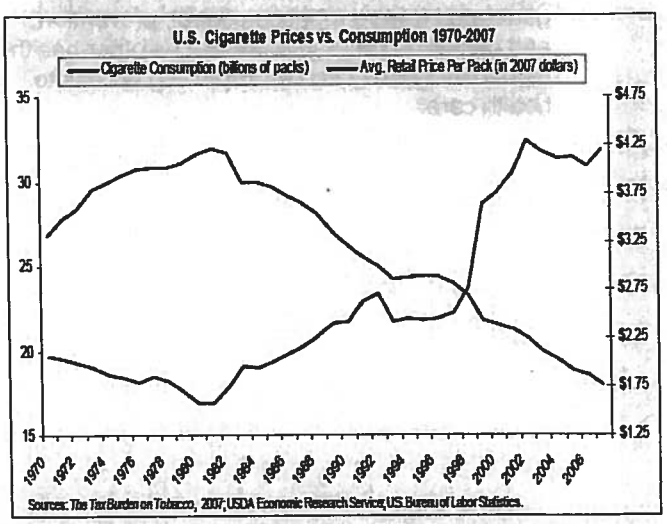
Smoking costs the U.S. economy more than $301 billion per year, including workplace productivity losses of $67.5 billion, premature death at $117 billion, and direct medical expenditures of $116 billion.[3] Tobacco control efforts by the AHA have contributed to a decline in U.S. cigarette consumption by more than 15% over the last decade.[4] However, despite this progress, 23.1 percent of men and 18.1 percent of women in the U.S. still smoke[4] and our efforts have stalled in the last five years, especially for people living below the poverty line and for those with low educational attainment.[1] Smokeless tobacco use is on the rise too and is highest in young men between the ages of 18 and 24 especially in the southeastern United States.[5] 88 million nonsmokers are still exposed to second hand smoke, especially in the home where children are disproportionately affected.[6]

To help save these lives, the AHA advocates for significant increases in tobacco excise taxes at the state, county or municipal levels that cover all tobacco products. These taxes are a health win that reduces tobacco use, saves lives, raises revenue for cash-strapped states, lowers health care costs and is a political win because they are popular with voters.

THE HEALTH BENEFITS

Many studies have examined the impact of cigarette tax increases on smoking prevalence, especially in youth. Most have found that higher taxes reduce consumption, especially cessation rates in young smokers.[7] The general consensus is that for every 10 percent increase in the real price of cigarettes it reduces overall cigarette consumption by approximately three to five percent, lowers the number of young-adult smokers by 3.5 percent, and cuts the number of kids who smoke by six or seven percent.[8]

- Other estimates are that a 40% tax-induced cigarette price increase would reduce smoking prevalence to 15.2% in 2025 with large gains in cumulative life years (7 million) and quality adjusted life years (13 million) for a total cost-savings of $682 billion.[9]
- Philip Morris calculated that the 1982-83 price increases caused two million adults to quit smoking and prevented 600,000 teenagers from starting to smoke.[10]
- The Institute of Medicine has concluded that the most direct and reliable method for reducing tobacco use is to increase the price of tobacco products, thus encouraging cessation and also reducing the number of kids who start using cigarettes or other tobacco products.[11]
- Cigarette price and tax increases work even more effectively to reduce smoking among males, Blacks, Hispanics, and lower-income smokers where smoking rates are often higher.[12,13]



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WHERE WE ARE NOW

- The federal government has imposed excise taxes, most recently with the expansion of the Children's Health Insurance Program. A cigarette tax increase of 61.66 cents per pack went into effect on April 1, 2009 making the current total federal tax $1.01/pack. There were also increases in the federal tax rates on other tobacco products such as smokeless products, "small cigars," roll-your-own tobacco, and regular cigars.[14]
- At the same time, states have imposed tobacco excise taxes with a current nationwide average of $1.45/pack (as of July 2010). This is an increase from an average of 43.4 cents in January 2002 – an incredible public health achievement.[11]
- However, there is still more to be done. As a highlight, the state of New York (June 2010) raised its cigarette tax by $1.60 to give it the highest cigarette tax in the nation at $4.35/pack.

INDUSTRY RESPONSE

- Industry documents show that the tobacco companies understand the impact of tax increases on consumption and have developed pricing strategies, including development of lower cost generic brands and price-related marketing efforts such as multi-pack discounts, and couponing to offset the impact of the taxes and diminish the benefit to public health.[15]
- The tobacco control movement has to continue to adapt to these industry tactics to maintain the health impact and value of tobacco tax strategies.

AHA ACTION PLAN

The AHA advocates for

- Significant increases in tobacco excise taxes at the state, county or municipal levels that cover all tobacco products.
- Allocation of at least some of these revenues generated toward tobacco control, prevention, and cessation programs, as well as other health-related initiatives such as improving access to health care.

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AHA/HPFS/1/2011

CAMPAIGN for TOBACCO-FREE Kids

LOCAL GOVERNMENT CIGARETTE TAX RATES & FEES

Most counties and cities do not have their own cigarette tax rates because they are prohibited by state law, but there are major exceptions. More than 450 local jurisdictions nationwide have their own cigarette tax rates or fees, bringing in more than $500 million in annual revenue and working effectively to reduce smoking rates, especially among youth, and to decrease smoking-caused death, disease, and costs. The following are some examples, including the local jurisdictions with the highest local and state-local cigarette tax rates.

City/County (Partial List)	Local Cigarette Tax (Per Pack)	State Cigarette Tax (Per Pack)	Total State + Local Tax (Per Pack)
Anchorage, Alaska	$2.206	$2.00	$4.206
Cook County, Illinois	$2.00	$1.98	$3.98[1]
New York City, New York	$1.50	$4.35	$5.85
Barrow, Alaska	$1.00	$2.00	$3.00
Matanuska-Susitna Borough, Alaska	$1.00	$2.00	$3.00
Sitka, Alaska	$1.00	$2.00	$3.00
Juneau, Alaska	$1.00	$2.00	$3.00
Falls Church, Virginia	$0.75	$0.30	$1.05
Fairfax, Virginia	$0.75	$0.30	$1.05
Vienna, Virginia	$0.75	$0.30	$1.05
Alexandria, Virginia	$0.80	$0.30	$1.10
Chicago, Illinois	$0.68	$1.98	$4.66[1]
Hampton, Virginia	$0.65	$0.30	$0.95
Newport News, Virginia	$0.65	$0.30	$0.95
Norfolk, Virginia	$0.65	$0.30	$0.95
Dumfries, Virginia	$0.60	$0.30	$0.90
Middleburg, Virginia	$0.55	$0.30	$0.85
Roanoke, Virginia	$0.54	$0.30	$0.84
Chesapeake, Virginia	$0.50	$0.30	$0.80
Portsmouth, Virginia	$0.50	$0.30	$0.80
Suffolk, Virginia	$0.50	$0.30	$0.80
Virginia Beach, Virginia	$0.50	$0.30	$0.80
Leesburg, Virginia	$0.50	$0.30	$0.80
Vienna, Virginia	$0.50	$0.30	$0.80
Franklin, Virginia	$0.50	$0.30	$0.80
Herndon, Virginia	$0.50	$0.30	$0.80
Evanston, Illinois	$0.50	$1.98	$4.48[1]
Lynchburg, Virginia	$0.35	$0.30	$0.65
Cuyahoga County, Ohio	$0.345	$1.25	$1.595
Fredericksburg, Virginia	$0.31	$0.30	$0.61
Harrisonburg, Virginia	$0.30	$0.30	$0.60
Haymarket, Virginia	$0.30	$0.30	$0.60
Purcellville, Virginia	$0.30	$0.30	$0.60
Charlottesville, Virginia	$0.25	$0.30	$0.55
Manassas, Virginia	$0.25	$0.30	$0.55
Williamsburg, Virginia	$0.25	$0.30	$0.55
San Francisco, California	$0.20[2]	$0.97	$1.07

Sources: Orzechowski & Walker, *Tax Burden on Tobacco*, 2011; media reports; state and local tax officials.

The table does not list all localities with their own cigarette tax or fee. Overall, Alabama (42.5 cents per pack) has 240 cities and 46 counties with their own cigarette taxes. Three other Illinois cities not in the above table have their own cigarette taxes, two of which are Cicero (16 cents per pack) and Rosemont (5 cents per pack). Missouri (17 cents per pack) has 120 cities and two counties. Ohio ($1.25 per pack)

[1] In Chicago ($0.68 per pack) and Evanston ($0.50), which are in Cook County, the total state-local tax is higher.
[2] Regulatory fee, not tax, to pay for cigarette litter cleanup. State law prohibits San Francisco from implementing a local cigarette tax.

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has one county with its own tax, Cuyahoga County (34.5 cents per pack). Tennessee (62 cents per pack) has one city. Virginia (30 cents per pack) has 50 cities and two counties with their own cigarette taxes.

New York City is the only locality with its own cigarette tax in New York State. Anchorage's cigarette tax is annually adjusted for inflation; Fairbanks' tax is actually 8 percent of wholesale price (about 20 cents per pack); and no unlisted Alaska cities have their own cigarette tax.

The combined cigarette tax rates in the table do not include the federal cigarette tax of $1.01 per pack or any state or local sales taxes that apply to cigarettes.

The U.S. Centers for Disease Control & Prevention (CDC) estimates that total smoking-caused health costs and lost productivity totals $10.47 per pack nationwide.

Some states prohibit localities from having their own cigarette tax rates or limit the maximum amounts.

The average state cigarette tax rate is $1.49 per pack and the highest state-only rate is New York ($4.35 per pack). Currently, 30 states, DC, Puerto Rico, the Northern Marianas, and Guam have cigarette tax rates of $1.00 per pack or higher; 14 states, DC, Puerto Rico, and Guam have cigarette tax rates of $2.00 per pack or higher; five states and Guam have cigarette tax rates of $3.00 per pack or higher; and one state (NY) has a cigarette tax rate higher than $4.00 per pack.

Campaign for Tobacco-Free Kids, June 11, 2012 / Ann Boonn

More information on cigarette taxes and the many public health and economic benefits from increasing them is available at http://www.tobaccofreekids.org/facts_issues/fact_sheets/policies/tax/us_state_local/.