

Keeping the Promise: Protecting Washington, DC from Tobacco

**A Special Report by the Campaign for Tobacco-Free Kids
September 2009**

The Campaign for Tobacco-Free Kids is an independent, non-partisan, nonprofit organization dedicated to preventing and reducing tobacco use and its harms, especially among youth. The Campaign does not receive or accept any government funding, nor does it receive or accept any funding from the tobacco industry. The Campaign works nationwide to support cost-effective state measures to reduce smoking and other tobacco use, save lives, and reduce smoking-caused harms and costs. For more information, see www.tobaccofreekids.org.



Keeping the Promise: Protecting Washington, DC from Tobacco

Introduction

Since its inception in November 2005, DC Tobacco Free Families (DCTFF) has successfully reduced smoking rates in Washington, DC. In January 2007, the DC Council allocated \$10 million in funding over three years for DCTFF to implement evidence-based programs to help tobacco users quit and to prevent youth from starting to smoke, especially among Medicaid recipients and underserved residents. Statistics show that these efforts have been successful. Between 2005 and 2008, adult smoking rates declined by 19 percent, from 20.1 percent to 16.2 percent, which means thousands of fewer smokers in the District, fewer tobacco-related deaths, and significant reductions in future health care costs, including Medicaid costs, caused by tobacco use.

Through a combination of tobacco prevention and cessation programming based on the U.S. Centers for Disease Control and Prevention's (CDC) Best Practice recommendations and tobacco control policies, the District has made tremendous strides in driving down tobacco use rates. However, tobacco still poses an enormous threat to District residents. Tobacco use is the leading preventable cause of death in DC, claiming more than 700 lives each year and costing the state \$243 million annually in health care bills, including \$78 million in Medicaid payments alone. And despite recent progress, 16 percent of adults still smoke and one in ten youth smoke. While youth smoking has declined since 2003, the most recent data show a slight increase in youth smoking, from 9.2 percent to 10.6 percent.

Most significant are the alarming disparities in tobacco use in the District. While smoking prevalence has declined overall, there are still significant disparities in tobacco use. In Ward 8, for example, while progress has been made in reducing tobacco use from 32 percent to 26 percent in the last three years, it still has a smoking prevalence ten percentage points above the overall prevalence for DC. Many of these individuals are on public assisted health care insurance and cost the District significant resources as a result of increased health care needs from tobacco-related illnesses.

This month, without any action by the DC government, this highly successful program will be virtually eliminated. As a result, the mass media campaign, community-based grants program and tobacco prevention initiatives will be abolished. Currently \$850,000 has been designated by the DC Cancer Consortium for tobacco cessation services through a competitive grant process, however no agency has been designated to receive these funds and no funds have been released. While \$850,000 will provide cessation services to a limited number of people, this amount is far short of what is needed to adequately address the toll of tobacco in the District.

Maintaining funding for DCTFF would secure millions of dollars in future health care cost savings by preventing District kids from becoming addicted smokers and by helping many current smokers and other tobacco users to quit. Funding for DCTFF should be maintained so it can continue its excellent work to help smokers throughout the District quit, prevent kids from smoking, address disparities in tobacco use, and reduce smoking-caused healthcare costs.

Without providing the adequate funds necessary to keep DCTFF's activities going, DC will be saddled with higher health costs and lower business productivity during these challenging economic times. DC can expect the following increases in youth tobacco use and related costs from failing to renew DCTFF's program funding, including 2,400 kids who will experiment with and become addicted to tobacco:¹

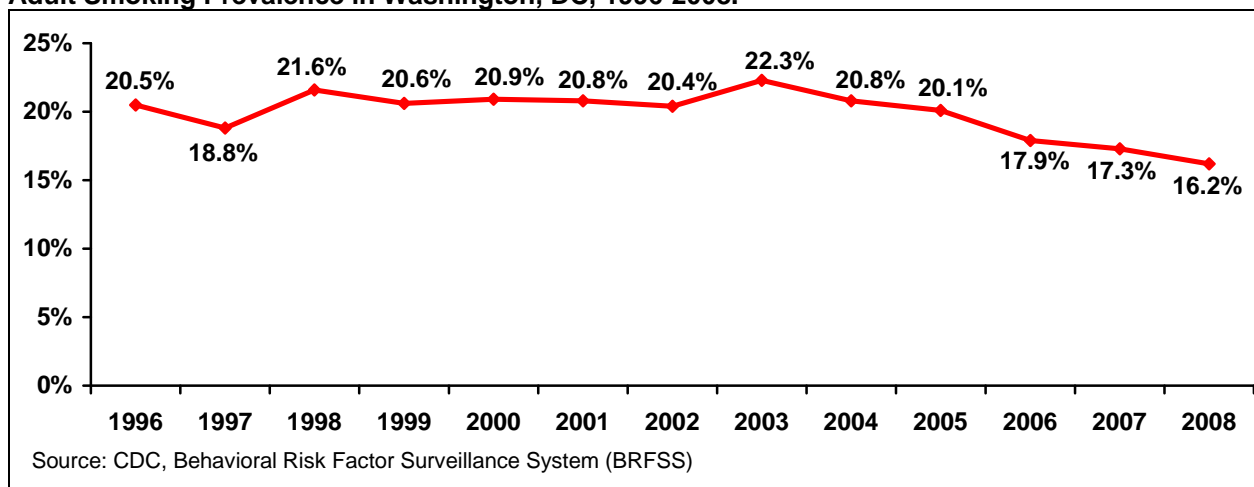
Increase in youth smoking	9.6%
Increase in number of current high school smokers	2,400
Increase in number of kids alive today who will suffer from premature smoking-caused death	760
Increase in net total state healthcare costs due to increased smoking	\$42.0 million
Increase in net total state Medicaid program expenditures	\$4.8 million

Although it has only been in operation for a short time, DC Tobacco Free Families has proven itself to be effective at preventing kids from starting to smoke and encouraging and assisting smokers to quit, ultimately reducing tobacco use rates. Funding for DCTFF should be maintained at its current level of \$3.6 million annually so it can continue its excellent work to prevent kids from smoking and help smokers quit.

Recent Successes

DC has had a few notable tobacco control successes in recent years. In January 2007, comprehensive smoke-free legislation went into effect, and in October 2008, the cigarette tax was doubled from \$1 to \$2 per pack. These policy changes, in combination with DCTFF's tobacco prevention and cessation programs, have contributed to an environment where tobacco use is less acceptable and desirable in the District. These efforts have also resulted in plummeting smoking rates over the last several years, following many years with little or no decline.

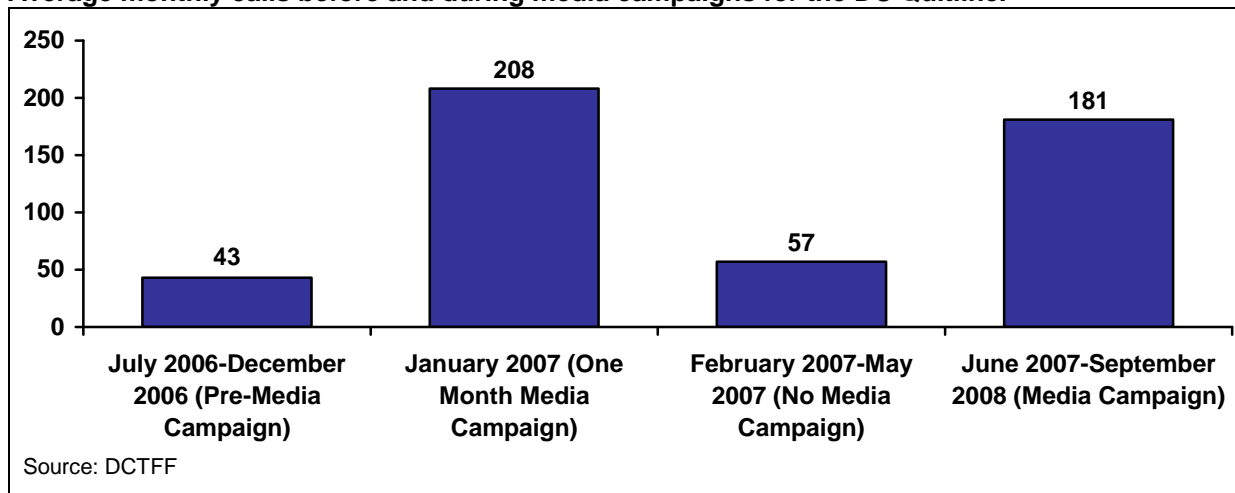
Adult Smoking Prevalence in Washington, DC, 1996-2008.



The 19.4 percent decline in adult smoking rates between 2005 and 2008 means that there are an estimated 18,500 fewer adult smokers in the District and 4,900 fewer future premature deaths from smoking. In addition, as a result of this decline, the District will save more than \$175 million in future health care costs from tobacco-related illnesses, \$19.9 million of which will be saved from future Medicaid costs.

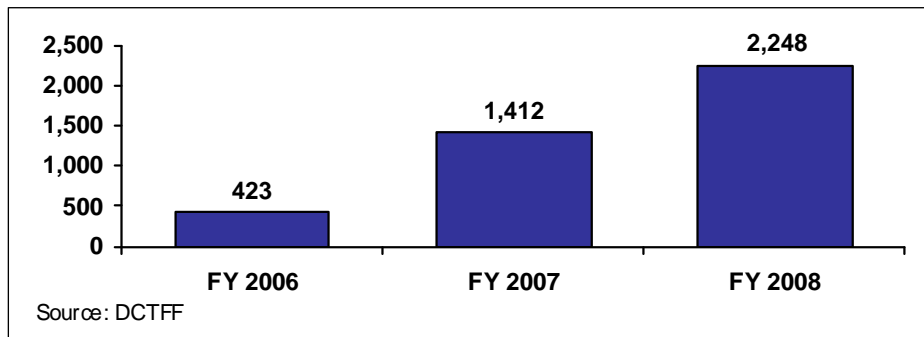
DCTFF programs have enhanced the impact of the smoke-free legislation and the cigarette tax by reinforcing these tobacco free policies, by promoting quitting, and by providing people with the help they need to quit. For example, around implementation of the smoke-free law and enactment of the cigarette tax, DCTFF's media campaign promoting DC's free Quitline and free cessation medications to District smokers was a critical piece to raise awareness of these services. The graph below shows how effective the media campaign was in generating calls to the quitline.

Average monthly calls before and during media campaigns for the DC Quitline.



Another indicator of the successful combination of policy change and effective programming is the number of people who seek assistance with quitting. Combined with DCTFF’s media campaign, after the cigarette tax increase went into effect, the DC Quitline saw a substantial rise in the number of callers who were looking for help to quit – a phenomenon that has also occurred in other states. Fortunately, DCTFF had the resources to provide effective cessation assistance to District residents. Research indicates that quitline counseling can more than double a smoker’s chances of quitting and quitline counseling combined with medication, as is offered in DC, can more than triple the chances of quitting.²

Calls to the DC Quitline before and after the media campaign around implementation of the smoke-free law and the cigarette tax increase.



Despite the tremendous success experienced in DC, there is still much work left for DCTFF to do. Adequate funding is crucial to enable DCTFF to continue its work, and to more effectively reach people in the areas with the highest tobacco use rates. Evidence from different states shows that when funding for tobacco prevention and cessation programs are cut, declines in adult smoking rates among adults and youth stalls or in some cases even begins to reverse.*

DCTFF’s Current Activities

Currently, DCTFF manages the DC Quitline operated by the American Cancer Society and provides and plans for all of the media activity needed to generate calls to the quitline. DCTFF has closely followed the research on the types of media that get the attention of smokers and encourage them to quit. Based on this research, DCTFF has used local sports heroes and poignant messaging about the effects that tobacco use has on families. It has also highlighted local issues related to tobacco

* See Campaign for Tobacco-Free Kids (TFK) factsheet, *The Impact of Reductions in Tobacco Control Program Funding*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0270.pdf>.

use, like missed school days for children who become sick from exposure to secondhand smoke and the impact of tobacco use on HIV+ individuals and those with mental illness.

DCTFF, which closely follows CDC Best Practices Guidelines, also provides healthcare provider trainings on treating tobacco use using the Public Health Service's *Clinical Practice Guidelines on Treating Tobacco Dependence*. To date, more than 600 DC providers have been trained to better understand how to work with patients to help them quit smoking and to encourage quit attempts. Seven out of 10 smokers want to quit and visit a healthcare professional at least once a year, and it is well-documented that healthcare providers can have a significant impact on helping a smoker quit by advising them to quit smoking.

In addition, DCTFF has worked with more than 50 community partners to change the social norms around tobacco use from acceptable to unacceptable. DCTFF has engaged the faith-based community through the Best Practices program, Tobacco Free Holy Grounds, with more than 30 churches signing on to have tobacco free grounds. DCTFF also works closely with DC Parks and Recreation to have Tobacco Free Sports Zones to encourage tobacco-free recreational parks where children play organized sports.

As part of the CDC's Best Practices, DCTFF provides significant grant funding to organizations like Mary's Center, which provides Latino outreach initiatives to reduce tobacco use in the Latino community, and the Mautner Project, which houses the Lesbian, Gay, Bi-sexual and Transgender (LGBT) workgroup to manage LGBT tobacco prevention and cessation programs. Grants are also provided to the YMCA, Step Afrika, and the Healthy Babies project, among others, to enable them to incorporate the tobacco free message into their organizational outreach programs.

Renewing funding for DCTFF will allow it to continue and improve this important work, and will reduce smoking, save lives, protect kids, and reduce smoking-caused health care costs.

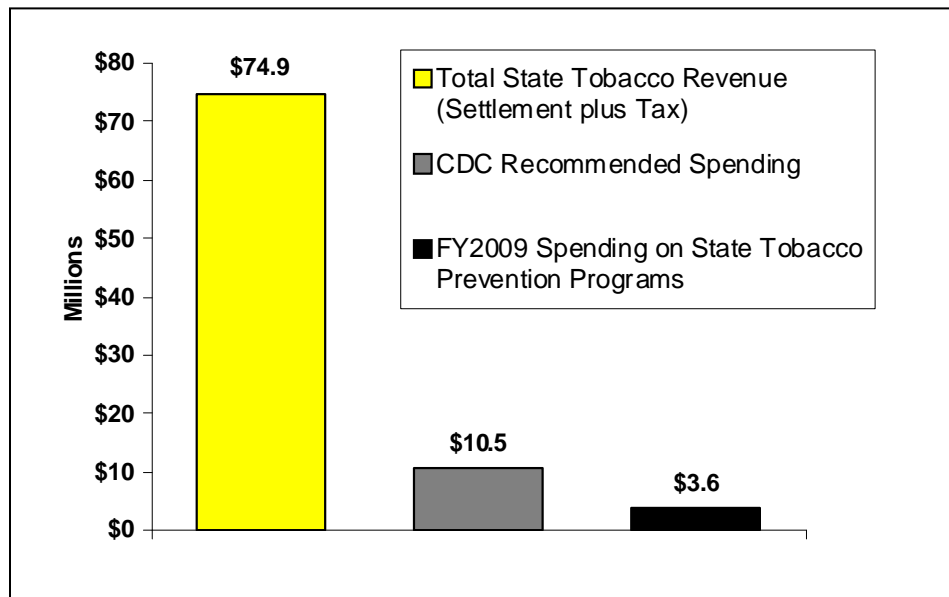
Washington, DC Needs to Do More to Reduce the Toll of Tobacco

While DCTFF has made impressive progress with its current budget, tobacco use continues to take its toll on DC residents, especially in Wards 5 through 8, and more funding is needed to enable it to continue the work it has already started. DCTFF has implemented a model that specifically targets the underserved, low SES smokers who are less likely to have access to evidence-based treatments, and provides significant support to these smokers through cessation services.³

Tobacco use kills more than 700 DC residents every year and costs the District \$243 million just in annual excess health care costs – much of it borne by taxpayers. Productivity losses from smoking total an additional \$232 million per year in the District, not even counting the productivity declines from smokers being sick more often than other workers and taking cigarette breaks while on the job. Despite recent progress in reducing smoking rates, 16.2 percent of adults in DC still smoke, a rate that varies widely among different wards. Youth also continue to smoke – 10.5 percent of high school kids smoke, and 8.1 percent of high school males use smokeless tobacco products. More than 1,600 District kids try smoking in the state each year and 400 more kids become regular, daily smokers every year, one-third of whom will die prematurely.* Statistics can be numbing, but we cannot forget that they represent mothers and fathers, brothers and sisters, colleagues and friends. Their suffering and their deaths have devastated too many families and communities.

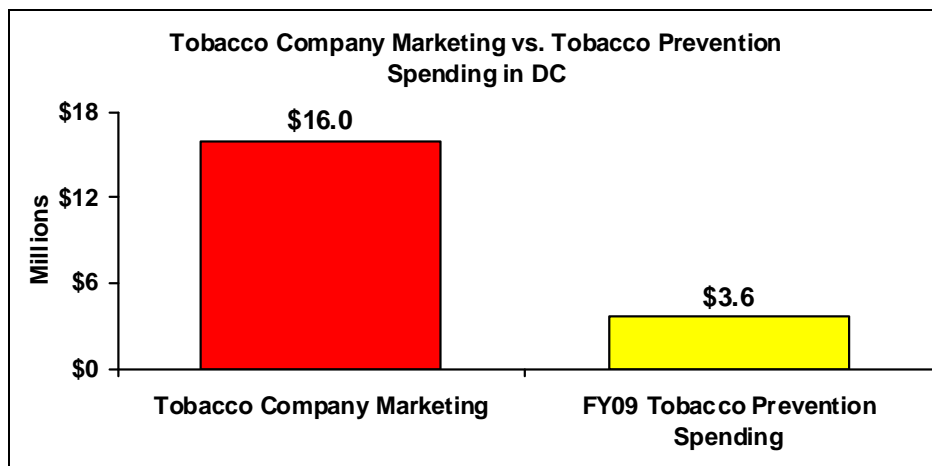
* For more detail on the toll of tobacco in Washington, DC, and citations to sources, see Appendix A.

The CDC recommends that DC spend \$10.5 million per year on a comprehensive tobacco control program that includes District-wide and community programs and media campaigns to prevent kids from starting to smoke and to help smokers quit.⁴ Not including grant money from the CDC, DC only spent \$3.6 million on tobacco prevention in FY 2009. This ranks DC 15th in the country in funding tobacco control programs.*



At the same time, DC received \$74.9 million from the 1998 tobacco lawsuit settlement payments, related bonus payments, and its tobacco taxes. The tobacco settlement was meant to provide funds to support state tobacco prevention efforts; but, so far, DC has not adequately allocated the tobacco settlement payments to prevent and reduce tobacco use and its harms.[†]

Meanwhile, tobacco companies are spending at least \$16.0 million annually on marketing and promoting their products in the District, especially in the Wards where you see the highest tobacco use rates. Many of these efforts target specific populations and are meant to encourage youth to start smoking, either by making the products look attractive or by lowering the product price to make them accessible to price-sensitive youth. Tobacco companies' own documents reveal how they consider youth the future of their business.



* The full rankings are available in the full report, *A Decade of Broken Promises: The 1998 State Tobacco Settlement Ten Years Later*, are available at <http://www.tobaccofreekids.org/reports/settlements/>.

[†] For more on DC's tobacco-related revenues versus its expenditures to prevent and reduce the massive harms and costs caused by smoking and other tobacco use, see *A Decade of Broken Promises: The 1998 State Tobacco Settlement Ten Years Later*, November 2008, a special report issued by the Campaign for Tobacco-Free Kids, American Heart Association, American Lung Association and American Cancer Society Cancer Action Network, <http://www.tobaccofreekids.org/reports/settlements>.

Although the 1998 Master Settlement Agreement placed some restrictions on tobacco company marketing activities, it failed to address many important matters. For example, the tobacco companies significantly increased their point-of-sale advertising after the MSA's ban on tobacco billboards went into effect. This trend continues today as tobacco companies have recently focused on in-store promotions and point-of-purchase advertising to attract younger smokers. This benefits the tobacco companies since research indicates that retail cigarette advertising increases the likelihood that youth will initiate smoking and cigarette promotions increase the likelihood that youth will move from experimentation to regular smoking.⁵

In addition, evidence clearly demonstrates that the tobacco industry targets the African-American community through intense advertising and promotional efforts. African-American communities have been bombarded with cigarette advertising – research indicates that there is more interior and exterior tobacco advertising in retail outlets in low-income communities and communities with larger African-American populations. In addition, since the MSA, the average youth in the United States is annually exposed to 559 tobacco ads, every adult female 617 advertisements, and every African American adult 892 ads.⁶

Further, new and less-expensive candy- and fruit-flavored products are being marketed aggressively, and young people are the most likely to use them.* A proven-effective way to oppose tobacco companies' attempts to attract youth to a lifetime of addiction and health problems is to invest in a comprehensive tobacco prevention program.

Adequately-Funded Tobacco Prevention Programs are Proven to Reduce Smoking and Related Harms and Costs

Extensive research on the experiences of other states makes it clear that renewing funding for DCTFF would significantly prevent and reduce smoking and other tobacco use in the District and produce enormous public health and economic benefits.

Most fundamentally, it is well established that comprehensive tobacco prevention programs consistent with CDC guidelines prompt substantial reductions in smoking levels among both adults and kids. This is achieved by both increasing the number of people who quit or cutback smoking and reducing the numbers who start. In addition, studies have shown that the more that is spent on tobacco prevention, the lower the youth smoking rates and overall tobacco use.[†] As a result, state tobacco prevention programs also reduce all the death, disease, disability and other harms caused by smoking and other tobacco use – and also save money by reducing tobacco-related health care costs.[‡]

National studies that look across states and control for as many of the relevant confounding factors as possible consistently show powerful, positive effects of tobacco prevention and cessation programs. For example:

- A recent study published in the *American Journal of Public Health* examined state tobacco prevention and cessation funding levels from 1995 to 2003 and found that the more states spent

* For more information on new tobacco products, see *Big Tobacco's Guinea Pigs: How an Unregulated Industry Experiments on America's Kids and Consumers*, February 2008, a special report issued by the Campaign for Tobacco-Free Kids, American Heart Association, American Lung Association and American Cancer Society Cancer Action Network, <http://www.tobaccofreekids.org/reports/products/index.php>.

† See, e.g., TFK Factsheet, *Comprehensive Tobacco Prevention and Cessation Programs Reduce Tobacco Use*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0045.pdf> and the references cited therein.

‡ For more on how state tobacco prevention programs cost-effectively save money, see TFK Factsheet, *Comprehensive Tobacco Prevention and Cessation Programs Save Money*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0168.pdf> and the references cited therein.

on these programs, the larger the declines they achieved in adult smoking, even when controlling for other factors such as increased tobacco prices. The researchers also calculated that if every state had funded their programs at the levels recommended by the CDC during that period, there would have been between 2.2 million and 7.1 million fewer smokers in the United States by 2003.⁷ The Campaign for Tobacco-Free Kids estimates that such smoking declines would have saved between 700,000 and 2.2 million lives as well as between \$20 billion and \$67 billion in health care costs.

- The study described above adds to earlier research, using similar methods, which demonstrated the same type of relationship between program spending and youth smoking declines. The 2005 study concluded that if every state had spent the minimum amount recommended by the CDC for tobacco prevention, youth smoking rates nationally would have been between 3 percent and 14 percent lower during the study period, from 1991 to 2000. Further, if every state funded tobacco prevention at CDC minimum levels, states would prevent nearly two million kids alive today from becoming smokers, save more than 600,000 of them from premature, smoking-caused deaths, and save \$23.4 billion in long-term, smoking-related health care costs.⁸
- In 2007, the Institute of Medicine and the President's Cancer Panel each issued separate landmark reports that reviewed available data, research, and other evidence and concluded that comprehensive state tobacco control programs substantially reduce smoking and other tobacco use among both adults and youth.⁹ Accordingly, both the Institute of Medicine and the President's Cancer Panel recommended that every state adequately fund their tobacco prevention programs at the CDC-recommended levels.

Over time, more evidence has accumulated on the power of investments in tobacco prevention and cessation to produce massive public health and economic benefits. For example, earlier studies had found that state tobacco prevention programs can, in their early years, save \$3 or more just from reduced state health care expenditures for every dollar spent.¹⁰ New research has added to these findings and shows that state programs secure even larger returns on investment for sustained funding of tobacco prevention at adequate levels over 10 or more years. Most notably, a new study of California's tobacco prevention program found that for every dollar the state spent on its tobacco control program from 1989 to 2004, the state received tens of dollars in savings in the form of sharp reductions to total health care costs in the state.¹¹ This study confirms that the cost-saving benefits from sustained state investments in effective tobacco control programs quickly grow over time to dwarf the state expenditures, producing massive gains for the state not only in terms of both improved public health and increased worker productivity but in reduced government, business, and household costs.

Similarly, an August 2008 study from Australia found that for every dollar spent on a strong tobacco control program there (consisting primarily of aggressive anti-smoking television ads along with telephone quitlines and other support services to help smokers quit) the program reduced future healthcare costs by \$70 over the lifetimes of the persons the program prompted to quit. This savings estimate was based on the study's finding that for every 10,000 people who quit because of the tobacco control program, more than 500 people were saved from lung cancer, more than 600 people escaped having heart attacks, at least 130 people avoided suffering from a stroke, and more than 1,700 people were prevented from suffering from chronic obstructive pulmonary disease (COPD).¹²

Substantial cost savings from getting adult smokers to quit begin to appear as soon as the smoking declines occur. Research studies estimate that the direct additional health care costs in the United States associated just with the birth complications caused by pregnant women smoking or being exposed to secondhand smoke could be as high as \$2 billion per year or more, with the costs linked to each smoking-affected birth averaging \$1,142 to \$1,358.¹³ And state Medicaid programs cover well over half of all births in the United States.¹⁴ Sharp drops in the major smoking-caused diseases (such as strokes, heart disease, and lung and other cancers), and the large related savings, do not

appear for several years after state adult smoking levels decline, but some small declines in these smoking-caused diseases do begin to occur immediately, with significant cost savings. In California, for example, the state tobacco control program's reductions to adult smoking in its first seven years produced healthcare costs savings of \$390 million just through the related declines in smoking-caused heart attacks and strokes, with more than \$25 million of those savings appearing in just the first two years.¹⁵ In addition, while most of the health care savings from getting kids to quit smoking or never start do not appear until years later, some savings from reducing youth smoking also appear immediately.

By quickly reducing the number of cigarettes smoked by adults and kids each year, tobacco-control programs also reduce other health problems and related costs caused by secondhand smoke. Adults and children with emphysema, asthma, or other respiratory illnesses, for example, can suffer immediate distress from being exposed to cigarette smoke, which can even lead to hospitalization in some cases.¹⁶

Reducing the number of cigarettes smoked can also reduce the number of smoking-caused fires and the amount of smoking-caused smoke damage, soiling, and litter. While no good estimates of the related cost savings exist, smoking-caused fires cause more than \$500 million in residential and commercial property losses each year; and business maintenance and cleaning costs caused by smoking annually total roughly \$5 billion nationwide.¹⁷

Adequately Funding DC Tobacco Free Families Will Reduce Smoking, Save Lives, and Protect Kids

Directing funds to expand DC's efforts to prevent and reduce tobacco use would dramatically improve the health of DC residents. Investments in an adequately-funded, well-run city-wide tobacco-prevention program in DC should reduce adult smoking by at least one percentage point per year – and each one percentage point decline in smoking in DC from increased state tobacco prevention funding would produce the following public health benefits, among others.

<i>Reduction in Current Adult Smokers</i>	4,700
<i>Reduction in Current Youth Smokers</i>	330
<i>Kids Alive Today Stopped from Becoming Addicted Adults</i>	1,100
<i>5-Year Reduction in Smoking-Affected Births</i>	440
<i>Total Future Smoking-Caused Deaths Avoided</i>	1,600

These estimates are conservative, however, because funding for the DCTFF would have an impact on the use of other tobacco products besides cigarettes, such as smokeless tobacco and cigars.

Currently, 5.6 percent of high schoolers in the District use smokeless tobacco. The habit is more popular among boys than girls, with 8.1 percent of high school boys using smokeless tobacco compared to 2.6 percent of high school girls.¹⁸ More must be done to address smokeless tobacco use among youth.

Cigar smoking is also increasing among kids, and is just as deadly and addictive as cigarettes. In Washington, DC, 10.1 percent of high school students smoke cigars, with twice as many boys as girls smoking cigars.¹⁹ Renewing funding for the tobacco prevention program would help to prevent youth from becoming addicted to smoking through trying cigars, which often come in kid-friendly flavors such as grape, cherry, and chocolate.

With renewed funding, DCTFF could help to prevent the death, disease, costs and other harms caused by these other tobacco products. DCTFF could continue the progress that has been made to encourage smokers to quit and youth to never start. Especially in the last two years, it is clear that DCTFF's unique ability to attract smokers to the quitline and to community-based programs has resulted in saving lives and future health care costs for the District.

Funding DC Tobacco Free Families Would Reduce Government, Private Sector, and Household Smoking-Caused Health Costs. Health care expenditures in DC caused by smoking add up to \$243 million annually. That includes \$78 million a year in Medicaid program costs, much of it paid by the District and DC taxpayers.* Maintaining funding for DC's efforts to prevent and reduce smoking and other tobacco use is a cost-effective method to reduce these costs to DC's government, businesses, and taxpayers.† In addition, businesses frequently cite health care costs as leading reasons for financial difficulties, or as a leading criterion for deciding where to locate.

Each one percentage point decline in adult and youth smoking rates secured by investments in tobacco prevention would also secure the following health care cost reductions.‡

Future Health Cost Savings from Youth Smoking Declines	\$19.3 million
Future Health Cost Savings from Adult Smoking Declines	\$44.7 million
5-Year Savings from Fewer Smoking-Caused Heart Attacks, Strokes, and Fewer Smoking-Affected Births	\$2.6 million

These short-term health care savings from heart-stroke and pregnancy cost reductions, which would begin to accrue immediately, represent only the tip of the savings iceberg for DC, as the smoking declines from a fully-funded program would immediately begin to reduce numerous other smoking-caused health costs as well. Unfortunately, available data and research are not currently adequate to make reliable estimates of the actual dollar amounts.

Investing in DCTFF Would Also Quickly Lock in Savings in the Medicaid Program. By prompting current adult and youth smokers to quit, helping former smokers from relapsing, and getting thousands of kids to never start smoking, tobacco prevention programs lock in enormous savings over the lifetimes of each person stopped from future smoking. Put simply, the lifetime health care costs of smokers total at least \$17,500 more than nonsmokers, on average, despite the fact that smokers do not live as long, with a somewhat smaller difference between smokers and former smokers.²⁰ That means that for every 1,000 kids kept from smoking by a state program, future health care costs in the state decline by roughly \$17.5 million (in current dollars), and for every 1,000 adults prompted to quit future health costs drop by roughly \$9.5 million.[§]

The long-term savings from state tobacco-prevention programs – as well as the immediate and short-term savings outlined above – also directly reduce state Medicaid program expenditures. More than 10 percent of all smoking-caused health care expenditures in the District are paid for by the Medicaid program.²¹

* For more detail on the economic toll of tobacco use in Washington, DC, see Appendix A.

† For more detail on how comprehensive tobacco prevention and cessation programs save money, See TFK Factsheet, *Comprehensive Tobacco Prevention and Cessation Programs Reduce Tobacco Use*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0168.pdf>

‡ For more detail on the benefits of a one percentage point decline in smoking in Washington, DC, see Appendix B. See also, TFK Factsheet, *Comprehensive Statewide Programs Reduce Tobacco Use*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0045.pdf>.

§ See TFK Factsheet, *Lifetime Healthcare Costs: Smokers v. Non-Smokers v. Former Smokers*, <http://tobaccofreekids.org/research/factsheets/pdf/0277.pdf>.

Investing in DCTFF for at least five years at the level recommended by the CDC would produce the following savings to the Medicaid program.

Medicaid Share of 5-Year Savings from Fewer Heart Attacks, Strokes, and Smoking-Affected Births	\$1.6 million
Future Medicaid Savings from Youth & Adult Smoking Declines	\$36.9 million

These savings would be even larger if DC followed the CDC program guidelines and other best practices to make sure it obtained above-average results. California, for example, which has run an exemplary tobacco prevention program focusing on reducing adult smoking, as well as youth tobacco use declines, has been found to have saved, in its first fifteen years, tens of dollars for every single dollar it invested in the tobacco prevention program.²² And California spent somewhat less than the CDC-recommended amounts during that time period; and would have reaped even larger savings if it had. But even without above-average or additional efforts, the projections here would continue to grow even larger after the first five years of the fully-funded program's efforts – locking in even larger future healthcare savings and Medicaid Program expenditure reductions.

The projections of overall healthcare savings to public, private sector, and household healthcare costs throughout the District would occur over the lifetimes of the smokers who quit or kids who never start smoking because of a fully-funded tobacco program. Besides Medicaid, DC would also see reductions to the smoking-caused health costs in other city or city-funded programs because of the smoking declines prompted by the program – and private sector and individual smoking-caused health costs would also decline. Most notably, decreasing smoking rates among workers would also lower public and private sector employers' health care and health insurance costs.

Businesses pay a large share of smoking-related healthcare costs. Studies have indicated that 30 to 85 percent of medical costs to employers are unnecessarily excessive and could be reduced if the health status of their employees was improved.²³ Each smoking employee costs their employer an estimated \$1,000 to \$4,600 per year in excess medical costs.²⁴ Studies show that smoking and other tobacco use decrease business productivity through high rates of absenteeism and reduced concentration and drive up businesses' health and non-health costs. With adequate funding, the DCTFF can not only protect kids from tobacco addiction, but can ensure that the District will offer business and government more healthy and productive employees in the future. Furthermore, reducing smoking among current adult smokers now will make DC's current workforce more healthy and productive, and reduce employers' related costs.

The Tobacco Use Declines from Funding DCTFF Would Also Reduce Public and Private Non-Health Costs. By reducing smoking and tobacco use, an adequately-funded tobacco prevention and cessation program would reduce a range of non-healthcare costs throughout the District, such as the amount of property damage and loss from smoking-caused fires and smoking-caused cleaning and maintenance costs, which total in the billions nationwide. But the biggest non-health-cost benefit might be the impact of the smoking declines on improving worker productivity and reducing related losses.

Currently, the CDC estimates that the productivity losses in DC from productive work lives being shortened by smoking-caused death total more than \$232 million each year.²⁵ DC's employers also suffer from substantial additional productivity losses caused by employees who smoke or use other tobacco products being sick more often, smoking employees taking cigarette breaks and being less productive on-the-job, and productive employees having to stop working because they are suffering from smoking-caused disease or disability. For example, one study found that smoking hurts productivity because employees who smoke are absent from work on average 6.16 days per year due to illness, whereas nonsmokers are absent on average 3.86 days per year.²⁶ Similarly, a study done for the Indiana Health Department determined that the cost of smoking employees to businesses in just a single Indiana county totaled \$260.1 million per year from increased

absenteeism and lost productivity, higher health insurance premiums, and increased recruitment and training costs from smoking employees' premature retirement and death.²⁷

By reducing smoking among workers, a fully-funded prevention and cessation program would cut public and private sector employer productivity losses by improving worker health and on-the-job performance, reducing the amount of smoking-caused work absences and work-time cigarette breaks, and reducing the number of productive work years lost from smoking-caused illness or disability interrupting or prematurely ending healthy and productive work lives. A healthier, more productive workforce would not only help existing city government and business employers, but would also make DC more attractive to businesses that might be considering leaving the city or other businesses the might be considering relocating to Washington, DC.

Failing to Renew DCTFF Funds Will Increase Tobacco Use, Related Harms, and Costs

Without renewed funding, DCTFF will be forced to eliminate more than 75 percent of its programmatic activities as of September 30, 2009. If that were to happen, at least a dozen organizations will no longer have funding to conduct prevention and outreach activities for DC smokers and youth. During the past three years, DCTFF has provided technical assistance, funding, and capacity-building programs to expand the reach of community-based organizations. All of these organizations provide direct services to the most at risk groups in the District: youth and the underserved African American, Latino, and LGBT populations.

Without providing the adequate funds necessary to keep DCTFF's activities going, DC will be saddled with higher health costs and lower business productivity during these challenging economic times. DC can expect the following increases in youth tobacco use and related costs from failing to renew DCTFF's program funding, including 2,400 kids who will experiment with and become addicted to tobacco:²⁸

<i>Increase in youth smoking</i>	9.6%
<i>Increase in number of current high school smokers</i>	2,400
<i>Increase in number of kids alive today who will suffer from premature smoking-caused death</i>	760
<i>Increase in net total state healthcare costs due to increased smoking</i>	\$42.0 million
<i>Increase in net total state Medicaid program expenditures</i>	\$4.8 million

Conclusion

Although it has only been in operation for a short time, DC Tobacco Free Families has proven effective at preventing kids from starting to smoke and encouraging and assisting smokers to quit, ultimately reducing tobacco use rates. Funding for DCTFF should be maintained at its current level of \$3.6 million annually so it can continue its excellent work to prevent kids from smoking and help smokers quit.

Tobacco is not only the number one preventable cause of death and disease in DC – it is a substantial drag on the District's economy. Investing in critically-important tobacco prevention and cessation efforts would produce enormous tobacco use declines and related public health and economic benefits immediately and for years to come. The people, businesses, and taxpayers of DC deserve no less.

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APPENDIX A

THE TOLL OF TOBACCO IN WASHINGTON, DC

Tobacco Use in Washington, DC

- High school students who smoke: 10.6% [Girls: 7.5% Boys: 13.5%]
- High school males who use smokeless tobacco: 8.1%
- Kids (under 18) who try cigarettes for the first time each year: 1,600
- Additional Kids (under 18) who become new regular, daily smokers each year: 400
- Packs of cigarettes bought or smoked by kids in Washington, DC each year: 0.8 million
- Kids exposed to second hand smoke at home: 40,000
- Adults in Washington, DC who smoke: 16.2% [Men: 19.1% Women: 13.7% Pregnant Females: 3.9%]

Nationwide, youth smoking has declined significantly since the mid-1990s, but that decline appears to have slowed. The 2007 Youth Risk Behavior Survey found that the percentage of high school students reporting that they have smoked cigarettes in the past month decreased to 20 percent in 2007 from 23 percent in 2005. 19.8 percent of U.S. adults (about 43.4 million) currently smoke, which is a significant decline from the 2006 rate of 20.8 percent.

Deaths in Washington, DC From Smoking

- Adults who die each year in Washington, DC from their own smoking: 720
- Adult nonsmokers who die each year from exposure to secondhand smoke: 80
- Washington, DC kids who have lost at least one parent to a smoking-caused death: 700
- Kids alive in state today who will ultimately die from smoking: 8,000 (given current smoking levels)

Smoking, alone, kills more people each year than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined. For every person in Washington, DC who dies from smoking approximately 20 more District residents are suffering from serious smoking-caused disease and disability, or other tobacco-caused health problems.

Tobacco-Related Monetary Costs in Washington, DC

- Annual health care expenditures in the District directly caused by tobacco use: \$243 million
- Annual health care expenditures in Washington, DC from secondhand smoke exposure: \$8.4 million
 - District Medicaid program's total health expenditures caused by tobacco use: \$78.0 million
- Citizens' District/federal taxes to cover smoking-caused gov't costs: \$151.1 million (\$602/household)
- Smoking-caused productivity losses in Washington, DC: \$232 million
- Smoking-caused health costs and productivity losses per pack sold in Washington, DC: \$22.04

The productivity loss amount, above, is from smoking-death-shortened work lives, alone. Additional work productivity losses totaling in the tens of billions nationwide come from smoking-caused work absences, on-the-job performance declines, and disability during otherwise productive work lives. Other non-health costs caused by tobacco use include direct residential and commercial property losses from smoking-caused fires (about \$400 million nationwide); and the costs of extra cleaning and maintenance made necessary by tobacco smoke and tobacco-related litter (about \$4+ billion per year for commercial establishments alone).

Tobacco Industry Advertising and Other Product Promotion

- Annual tobacco industry marketing expenditures nationwide: \$12.8 billion (\$35+ million per day)
- Estimated portion spent in Washington, DC each year: \$16.0 million

Published research studies have found that kids are three times more sensitive to tobacco advertising than adults and are more likely to be influenced to smoke by cigarette marketing than by peer pressure, and that one-third of underage experimentation with smoking is attributable to tobacco company marketing.

Washington, DC Government Policies Affecting The Toll of Tobacco in Washington, DC

- Annual District tobacco prevention spending from tobacco settlement and tax revenues: \$3.6 million [National rank: 15 (with 1 the best), based on percent of CDC recommendation]
- District cigarette tax per pack: \$2.50 [National rank: 8th (average state tax is \$1.34 per pack)]

Sources

Youth smoking. 2007 Youth Risk Behavior Survey. A 2005 YRBS found that 9.2% of high school students smoked. Current smoking = smoked in past month. The 2003 National Youth Risk Behavior Survey, using a different methodology than the YTS, found that 21.9% of U.S. high school kids smoke and 11% of high school males use spit tobacco. **Male youth smokeless.** 2007 YRBS. A 2005 YRBS found that 2.7% of high school males used spit tobacco. Female smokeless use is much lower. **New youth smokers.** Estimate based on U.S. Dept of Health & Human Services (HHS), "Summary Findings from the 2007 Nat'l Survey on Drug Use and Health," <http://www.oas.samhsa.gov/NSDUH/2k7NSDUH/tabs/Sect4peTabs10to11.pdf>, with the state share of the national number allocated through the formula in U.S. Centers for Disease Control & Prevention (CDC), "Projected Smoking-Related Deaths Among Youth—United States," *Morbidity & Mortality Weekly Report (MMWR)* 45(44):971-74, November 8, 1996 [based on state young adult smoking rates, as updated in CDC, *Sustaining State Programs for Tobacco Control, Data Highlights, 2006*]. **Smokefree workplaces.** Shopland, D, et al., "State-Specific Trends in Smoke-Free Workplace Policy Coverage: The Current Population Survey Tobacco Use Supplement, 1993 to 1999," *Jnl of Occupational & Environmental Medicine* 43(8):680-86, August 2001. **Kids exposed to secondhand smoke.** CDC, "State-Specific Prevalence of Cigarette Smoking Among Adults & Children's and Adolescents' Exposure to Environmental Tobacco Smoke—United States, 1996," *MMWR* 46(44):1038-43, November 7, 1997. **Packs consumed by kids.** Estimated from Washington, DC's youth population & smoking rates; and see DiFranza, J & Librett, J, "State and Federal Revenues from Tobacco Consumed by Minors," *Am. Jnl of Public Health* 89(7):1106-08, July 1999 & Cummings, et al., "The Illegal Sale of Cigarettes to US Minors: Estimates by State," *AJPH* 84(2):300-302, February 1994. **Adult smoking.** State: 2008 BRFSS, *Behavioral Risk Factor Surveillance System*. National: 2007 Nat'l Health Interview Survey (NHIS), <http://www.cdc.gov/mmwr/PDF/wk/mm5745.pdf> **Pregnant Females.** CDC, "Smoking During Pregnancy—United States, 1990-2002," *MMWR* 53(39):911-15, October 8, 2004, <http://www.cdc.gov/mmwr/PDF/wk/mm5339.pdf>.

Adult deaths. CDC's STATE System (avg annual deaths from 2000-2004), <http://apps.nccd.cdc.gov/StateSystem/systemIndex.aspx>. CDC, "State-Specific Smoking-Attributable Mortality and Years of Potential Life Lost – United States, 2000-2004," (*MMWR*) 58(2), January 22, 2009; U.S. General Accounting Office (GAO), "CDC's April 2002 Report on Smoking: Estimates of Selected Health Consequences of Cigarette Smoking Were Reasonable," letter to U.S. Rep. Richard Burr, <http://www.gao.gov/new.items/d03942r.pdf>, July 16, 2003. **Lost Parents.** Leistikow, B, et al., "Estimates of Smoking-Attributable Deaths at Ages 15-54, Motherless or Fatherless Youths, and Resulting Social Security Costs in the United States in 1994," *Preventive Medicine* 30(5):353-360, May 2000, and state-specific data from author. **Projected youth smoking deaths.** CDC, *State Highlights 2006*: CDC, "Projected Smoking-Related Deaths Among Youth—United States," *MMWR* 45(44):971-974, November 11, 1996, www.cdc.gov/mmwr/mmwr_wk.html. **Secondhand smoke deaths.** California EPA, *Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant*, June 24, 2005, <http://repositories.cdlib.org/tc/surveys/CALEPA2005C/>. See also, CDC, "Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses—United States, 2000-2004," *MMWR* 57(45):1226-1228, November 14, 2008, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a3.htm>. **Health and productivity costs caused by tobacco use.** CDC, *State Data Highlights 2006* [and underlying CDC data/estimates], http://www.cdc.gov/tobacco/data_statistics/state_data/data_highlights/2006/index.htm. CDC, Smoking Attributable Mortality, Morbidity and Economic Costs, SAMMEC <http://apps.nccd.cdc.gov/sammecl>; AO, <http://www.gao.gov/new.items/d03942r.pdf>, July 16, 2003. State Medicaid program expenditures are before any federal reimbursement. **SHS Costs.** Behan, DF, et al., *Economic Effects of Environmental Tobacco Smoke*, Society of Actuaries, March 31, 2005, [http://www.soa.org/files/pdf/ETSReportFinalDraft\(Final%203\).pdf](http://www.soa.org/files/pdf/ETSReportFinalDraft(Final%203).pdf) [nationwide costs allocated to state based on its share of all U.S. smokers]. **State-federal tobacco tax burden.** Equals Washington, DC residents' federal & state tax payments necessary to cover all state government tobacco-caused costs plus the residents' pro-rata share, based on state populations, of all federal tobacco-caused costs. See above and Zhang, X, et al., "Cost of Smoking to the Medicare Program, 1993," *Health Care Financing Review* 20(4):1-19, Summer 1999; Office of Management & Budget, *Budget for the United States Government - Fiscal Year 2000*, Table S-8, 1999; Leistikow, B, et al., "Estimates of Smoking-Attributable Deaths at Ages 15-54, Motherless or Fatherless Youths, and Resulting Social Security Costs in the United States in 1994," *Preventive Medicine* 30(5):353-360, May 2000 – with other state government tobacco costs taken to be 3% of all District smoking-caused health costs, as in CDC, "Medical Care Expenditures Attributable to Smoking—United States, 1993," *MMWR* 43(26):1-4, July 8, 1994. CDC's *State Data Highlights 2006* provides cost estimates that have been adjusted for inflation and put in 2004 dollars. To make the other cost data similarly current and more comparable, they have also been adjusted for inflation and put in 2004 dollars, using the same CDC methodology.

Other tobacco-related costs. U.S. Treasury Dept., *Economic Costs of Smoking in the U.S. & the Benefits of Comprehensive Tobacco Legislation*, 1998; Chaloupka, F.J. & K.E. Warner, "The Economics of Smoking," in Culyer, A & Newhouse, J (eds), *Handbook of Health Economics*, 2000; CDC, *MMWR* 46(44), November 7, 1997; CDC, *Making Your Workplace Smokefree: A Decision Maker's Guide*, 1996; Mudarri, D, U.S. Environmental Protection Agency, *Costs & Benefits of Smoking Restrictions: An Assessment of the Smoke-Free Environment Act of 1993 (H.R. 3434)*, submitted to Subcommittee on Health & the Environment, Committee on Energy & Commerce, U.S. House of Rep., April 1994; Brigham, P & McGuire, A, "Progress Toward a Fire-Safe Cigarette," *Jnl of Public Health Policy* 16(4):433-439, 1995; Hall, JR, Jr., Nat'l Fire Protection Assoc., *The Smoking-Material Fire Problem*, November 2004. U.S. Fire Admin./Nat'l Fire Data Center, Federal Emergency Management Agency (FEMA), *Residential Smoking Fires & Casualties*, Topical Fire Research Series 5(5), June 2005, <http://www.usfa.fema.gov/downloads/pdf/frs/v5i5.pdf>.

Tobacco industry marketing. U.S. Federal Trade Commission (FTC), *Cigarette Report for 2006, 2009* [data for top five manufacturers only], <http://ftc.gov/os/2009/08/090812cigarettereport.pdf>; FTC, *Federal Trade Commission Smokeless Tobacco Report for 2006, 2009* <http://ftc.gov/os/2009/08/090812smokelesstobaccoreport.pdf> [top five manufacturers]. State total a prorated estimate based on cigarette pack sales in the state. See, also Campaign factsheet, *Increased Cigarette Company Marketing Since the Multistate Settlement Agreement Went into Effect*, <http://tobaccofreekids.org/research/factsheets>. **Tobacco marketing influence on youth.** Pollay, R, et al., "The Last Straw? Cigarette Advertising & Realized Market Shares Among Youths & Adults," *Jnl of Marketing* 60(2):1-16, April 1996); Evans, N, et al., "Influence of Tobacco Marketing & Exposure to Smokers on Adolescent Susceptibility to Smoking," *Jnl of the Nat'l Cancer Inst* 87(20):1538-45, October 1995. See also, Pierce, JP, et al., "Tobacco Industry Promotion of Cigarettes & Adolescent Smoking," *Jnl of the American Medical Association (JAMA)* 279(7):511-505, February 1998 [with erratum in *JAMA* 280(5):422, August 1998]. See, also, Campaign factsheet, *Tobacco Marketing to Kids*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0008.pdf>.

Washington, DC spending to reduce tobacco use and ranking. Campaign for Tobacco-Free Kids, et al., *A Decade of Broken Promises: The 1998 State Tobacco Settlement Ten Years Later*, November 18, 2008, <http://tobaccofreekids.org/reports/settlements>. **Washington, DC cigarette tax and rank.** Orzechowski & Walker, *The Tax Burden on Tobacco* (2007) [industry-funded annual report], with updates from state agencies and media reports.

APPENDIX B

BENEFITS & SAVINGS FROM EACH ONE PERCENTAGE POINT DECLINE IN WASHINGTON, DC SMOKING RATES

The following estimates show the benefits and savings that are obtained in Washington, DC for each one percentage point decline in adult and youth smoking rates in the District (e.g., from new District investments in tobacco prevention or increased District tobacco tax rates). These estimates can also be switched around to show what harms and costs Washington, DC would suffer from each one percentage point increase to its smoking rates or from each one percentage point reduction the District fails to obtain (e.g., because it fails to sustain adequate District tobacco prevention funding or lets its tobacco tax rates erode over time).

Fewer Smokers

Fewer current adult smokers: 4,700

Fewer current pregnant smokers: 90

Fewer current high school smokers: 330

Washington, DC kids alive today who will not become addicted adult smokers: 1,100

Public Health Benefits

Today's adults saved from dying prematurely from smoking: 1,200

Today's high school smokers saved from dying prematurely from smoking: 110

Washington, DC kids alive today who will not die prematurely from smoking: 350

	<u>First Year</u>	<u>Over 5 Years</u>
<i>Fewer smoking-affected births:</i>	90	440
<i>Fewer smoking-caused heart attacks:</i>	2	25
<i>Fewer smoking-caused strokes:</i>	1	13

[The number of heart attacks and strokes prevented each year by a one-time decline in adult smoking rates of one percentage point starts out small but grows sharply until it peaks and stabilizes after about ten years.]

Monetary Benefits (Reduced Public, Private, and Individual Smoking-Caused Costs)

	<u>First Year</u>	<u>Over 5 Years</u>
<i>Savings from smoking-affected birth reductions</i>	\$0.2 million	\$0.8 million
<i>Savings from heart attack & stroke reductions</i>	\$0.1 million	\$1.8 million

[Annual savings from fewer smoking-caused heart attacks and strokes grows substantially each year as more and more are prevented by the initial one percentage point smoking decline. Savings from prevented smoking-caused cancer are even larger, but do not begin to accrue until several years after the initial smoking decline.]

Reduction to future health costs from adult smoking declines: \$44.7 million

Reduction to future health costs from youth smoking declines: \$19.3 million

[These savings accrue over the lifetimes of the adults who quit and the youth who do not become adult smokers. Roughly 11.4% of smoking-caused healthcare expenditures in Washington, DC are paid by its Medicaid program.]

At the same time that they reduce public and private smoking-caused costs, District smoking declines also increase public and private sector worker productivity and strengthen the District's economy.

References:

- ¹ Calculations based on Tauras, JA, et al., "State Tobacco Control Spending and Youth Smoking," *American Journal of Public Health (AJPH)* 95(2): 338-44, February 2005 [and related data and projections from the authors]. Farrelly, MC, et al., "The Impact of Tobacco Control Programs on Adult Smoking" *AJPH* 98(2), February 2008 [and related data and projections provided by the authors]. CDC, Best Practices for Comprehensive Tobacco Control Programs—2007, October 2007. CDC, Data Highlights 2006 [and underlying CDC data/estimates]. Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures," *Millbank Quarterly* 70(1):81-115, 1992 [and see related information at <http://tobaccofreekids.org/research/factsheets/pdf/0277.pdf>]. CDC, "Projected Smoking-Related Deaths Among Youth—United States," *Morbidity and Mortality Weekly Report (MMWR)* 45(44):971-974, November 8, 1996. CDC, "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs—United States 1995-1999," *MMWR* 51(14):300-303, April 11, 2002.
- ² Fiore MC, et al., *Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guideline*, U.S. Public Health Service, May 2008, http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf.
- ³ Halpin, HA, et al., "Update: State Report: Medicaid Coverage for Tobacco-Dependence," *Health Affairs*, March/April 2006.
- ⁴ CDC, *Best Practices for Comprehensive Tobacco Control Programs*, Atlanta, GA: U.S. Department of Health and Human Services (HHS), October 2007.
- ⁵ Slater, SJ, et al., "The Impact of Retail Cigarette Marketing Practices on Youth Smoking Uptake," *Archives of Pediatrics and Adolescent Medicine* 161:440-445, May 2007.
- ⁶ Connolly, GN, Testimony before the Senate HELP Committee, February 27, 2007.
- ⁷ Farrelly, MC, et al., "The Impact of Tobacco Control Programs on Adult Smoking," *American Journal of Public Health* 98:304-309, February 2008. See, also, Hyland, A, et al., "State and Community Tobacco-Control Programs and Smoking-Cessation Rates Among Adult Smokers: What Can We Learn From the COMMIT Intervention Cohort?," *American Journal of Health Promotion* 20(4):272-81, March-April, 2006.
- ⁸ Tauras, JA, et al., "State Tobacco Control Spending and Youth Smoking," *American Journal of Public Health* 95:338-344, February 2005.
- ⁹ Institute of Medicine, *State Programs Can Reduce Tobacco Use*, National Academy of Sciences, 2000; HHS, *Reducing Tobacco Use: A Report of the Surgeon General*, 2000.
- ¹⁰ Tobacco Control Section, California Department of Health Services, *California Tobacco Control Update*, August 2000, <http://www.dhs.ca.gov/tobacco/documents/pubs/CTCUpdate.pdf> or <http://www.dhs.ca.gov/tobacco>.
- ¹¹ Lightwood, JM, et al., "Effect of the California Tobacco Control Program on Personal Health Care Expenditures," *PLOS Medicine* 5(8):1214-22, August 2008, <http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371%2Fjournal.pmed.0050178>.
- ¹² Hurley, SF & Matthews, JP, "Cost-Effectiveness of the Australian National Tobacco Campaign," *Tobacco Control*, <http://tobaccocontrol.bmj.com/cgi/content/abstract/tc.2008.025213v1>, published online August 21, 2008.
- ¹³ Miller, P, et al., "Birth and First-Year Costs for Mothers and Infants Attributable to Maternal Smoking," *Nicotine & Tobacco Research* 3(1):25-35, February 2001. Lightwood, JM, et al., "Short-Term Health and Economic Benefits of Smoking Cessation: Low Birth Weight," *Pediatrics* 104(6):1312-20, December 1999. Adams, EK & Melvin, CL, "Costs of Maternal Conditions Attributable to Smoking During Pregnancy," *American Jnl of Preventive Medicine* 15(3): 212-19, October 1998. CDC, "Medical Care Expenditures Attributable to Cigarette Smoking During Pregnancy – United States, 1995," *MMWR* 46(44):1048-1050, November 7, 1997, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00049800.htm>.
- ¹⁴ Orleans, CT, et al., "Helping Pregnant Smokers Quit: Meeting The Challenge in the Next Decade," *Tobacco Control* 9(Supplemental III):6-11, 2000.

-
- ¹⁵ Lightwood, J & Glantz, S, "Short-term Economic and Health Benefits of Smoking Cessation: Myocardial Infarction and Stroke," *Circulation*, 96:1089-1096, 1997. See, also, Kabir, et al., "Coronary Heart Disease Deaths and Decreased Smoking Prevalence in Massachusetts, 1993-2003," *American Journal of Public Health* 98(8):1468-69, August 2008.
- ¹⁶ See, e.g, California Environmental Protection Agency, *Health Effects of Exposure to Environmental Tobacco Smoke*, 1997, http://www.oehha.org/air/environmental_tobacco/finalets.html.
- ¹⁷ Hall, JR, Jr., *The U.S. Smoking-Material Fire Problem*, National Fire Protection Association, April 2001; Mudarri, D, *The Costs and Benefits of Smoking Restrictions: An Assessment of the Smoke-Free Environment Act of 1993 (H.R. 3434)*, U.S. Environmental Protection Agency report submitted to the Subcommittee on Health and the Environment, Committee on Energy and Commerce, U.S. House of Representatives, April 1994; CDC, *Making Your Workplace Smokefree: A Decision Maker's Guide*, 1996.
- ¹⁸ CDC, "Youth Risk Behavior Surveillance, United States, 2007," *MMWR* 57(SS-4), June 6, 2008 <http://www.cdc.gov/mmwr/pdf/ss/ss5704.pdf>. 2007 Youth Risk Behavior Survey.
- ¹⁹ CDC, "Youth Risk Behavior Surveillance, United States, 2007," *MMWR* 57(SS-4), June 6, 2008 <http://www.cdc.gov/mmwr/pdf/ss/ss5704.pdf>.
- ²⁰ Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures," *The Millbank Quarterly* 70(1), 1992 [study's results converted to 2004 dollars using Consumer Price Index for medical care prices (following CDC updating formulas and procedures)]. See also, Nusselder, W, et al., "Smoking and the Compression of Morbidity," *Epidemiology and Community Health*, 2000; Warner, KE, et al., "Medical Costs of Smoking in the United States: Estimates, Their Validity, and Their Implications," *Tobacco Control* 8(3):290-300, Autumn 1999.
- ²¹ Miller, L, et al., "State Estimates of Medicaid Expenditures Attributable to Cigarette Smoking, Fiscal Year 1993," *Public Health Reports* 113:140-151, March/April 1998. On average, the federal government reimburses the states for roughly 57% of their Medicaid program costs, <http://www.hcfa.gov/medicaid/medicaid.htm>.
- ²² Lightwood, JM et al., "Effect of the California Tobacco Control Program on Personal Health Care Expenditures," *PLOS Medicine* 5(8): 1214-22, August 2008, <http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371%2Fjournal.pmed.0050178>.
- ²³ Musich, S, et al., "Association of Health Risks with Workers' Compensation Costs," *Journal of Occupational and Environmental Medicine* 43(6):534-541, June 2001.
- ²⁴ CDC, "Making Your Workplace Smokefree: A Decision-Maker's Guide," 1996, http://www.cdc.gov/tobacco/secondhand_smoke/00_pdfs/fullguide.pdf; Thomas, M, "Just think of it as rewarding nonsmokers," *Orlando Sentinel*, March 28, 2002; Jefferson, S, "State says \$330 million a year goes up in smoke," *Pacific Business News*, October 18, 2002.
- ²⁵ CDC, *State Data Highlights*, 2006 [and underlying CDC data/estimates], <http://www.cdc.gov/tobacco/datahighlights/2006/index.htm>; CDC's STATE System average annual smoking attributable productivity losses from 1997-2001(1999 estimates updated to 2004 dollars) CDC, "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States 1995-1999," *MMWR*, April 11, 2002, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm>.
- ²⁶ Halpren, MT, et al., "Impact of smoking status on workplace absenteeism and productivity," *Tobacco Control* 10(3):233-238, September 2001.
- ²⁷ Zollinger, TW, et al., "The economic impact of secondhand smoke on the health of residents and employee smoking on business costs in Marion County, Indiana for 2000," *Marion County Health Dept*, February 2002.
- ²⁸ Calculations based on Tauras, JA, et al., "State Tobacco Control Spending and Youth Smoking," *American Journal of Public Health (AJPH)* 95(2): 338-44, February 2005 [and related data and projections from the authors]. Farrelly, MC, et al., "The Impact of Tobacco Control Programs on Adult Smoking" *AJPH* 98(2), February 2008 [and related data and projections provided by the authors]. CDC, Best Practices for Comprehensive Tobacco Control Programs—2007, October 2007. CDC, Data Highlights

2006 [and underlying CDC data/estimates]. Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures," *Millbank Quarterly* 70(1):81-115, 1992 [and see related information at <http://tobaccofreekids.org/research/factsheets/pdf/0277.pdf>]. CDC, "Projected Smoking-Related Deaths Among Youth—United States," *MMWR* 45(44):971-974, November 8, 1996. CDC, "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs—United States 1995-1999," *MMWR* 51(14):300-303, April 11, 2002.