

# **Policy, Systems, and Environmental Change Strategies for Community Health**

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**Start where you are.  
Use what you have.  
Do what you can.**

--Arthur Ashe

### Summary:

The following white paper provides an overview of Healthy Tarrant County Collaboration (HTCC), detailing the organizational mission and efforts in the field of policy, system and environmental change strategies. It includes an overview of the elements in a Policy, Systems, Environmental (PSE) change strategy and highlights the seven steps involved.

This segment will be followed by real life applications of those steps using four initiatives Healthy Tarrant County Collaboration (HTCC) has been involved in. The paper concludes with a summarized overview of the process and how it can help other organizations in their public health and community efforts.

### Introduction: A Message from The Executive Director of HTCC

There are few challenges greater than providing individuals and families with the knowledge, tools and resources they need to improve their health and reduce their risk for obesity and chronic disease. On the one hand, it is important for people to know what they need to do. Awareness is the easy part. But awareness alone seldom leads to a sustained change in an individual's healthy habits. The gap between awareness and action is where Healthy Tarrant County Collaboration is focusing its efforts.

The gap between awareness and action is shaped by many forces, some of which people can control directly, and others that end up controlling them. For many years, too much emphasis has been placed on educating people on what they need to do, without addressing the challenges that keep people from implementing the knowledge and skills that they acquire through education. For that reason, Healthy Tarrant County Collaboration is placing a priority on building policy, systems, and environmental strategies into community health improvement plans.

Healthy Tarrant County Collaboration helps our hospitals, public health department, and universities collaborate across their respective disciplines on projects aimed at helping Tarrant County residents become healthier.

We use the Spectrum of Prevention framework to identify the existing multi-faceted range of activities in our community as well as to identify the gaps. This helps to guide our efforts to where we can make the greatest impact, and to reduce chances of duplicating the work of others.

Our current areas of focus include piloting and implementing healthy retail policies and strategies to increase access to healthier foods in a large Tarrant County healthy foods priority area.

I invite you to join us in our quest. Each person that volunteers, joins and learns about Healthy Tarrant County Collaboration and our work contributes to our mission. Please feel free to contact me should you have any questions.

Linda Fulmer  
Executive Director, Healthy Tarrant County Collaboration



## Solution: What are Policy, Systems and Environmental (PSE) Change Strategies?

Policy, System, and Environmental (PSE) change strategies are tools that can help community leaders and public health advocates create pathways to improve community health. As opposed to one-time events or programs that may affect one aspect of a community problem, these strategies incorporate all three elements that together can create a long term sustainable working plan within a community.

It is important to note that these strategies often work together, one element leading to another, creating a non-linear process. For example, a problem may initially seem to be solved with a policy change. After working through the steps of the framework, however, it can become clear that environmental and system changes must be applied. Ultimately, the use of the Policy, System, and Environmental (PSE) change approach should benefit communities, reach the intended populations, and disclose other elements that can be improved for a sustainable outcome.

Understanding the elements is the first step in knowing how to identify where those fit within this puzzle of change.

- **What is policy change?**
  - Policy change may be made at both the government and non-government levels. These can be policy changes in the form of laws, ordinances, mandates, or regulations.
- **What is system change?**
  - System change entails those changes made to the rules of an organization and/or the change of an infrastructure. System change may include changing the culture of an organization or policies and procedures within an organization to enable easier access to services and a healthier space to live, work, and play.
- **What is environmental change?**
  - Environmental change are amendments made that impact the physical environment surrounding us every day. This may include structural, social, or economic environments that may influence either individual or community behavior and practices.

### PSE Development Framework – Policy, Systems, Environmental Change



To better understand how these steps affect the individuals' thought process, a quote by the legendary tennis professional and humanitarian, Arthur Ashe, helps to put them into categories.



- **Start where you are:**
  1. Build partnerships
  2. Identify the issue
- **Use what you have:**
  3. Determine your options
  4. Reviewing feasibility to determine whether the plan can be implemented
- **Do what you can:**
  5. Develop your advocacy plan to get the idea into policy
  6. Implement - making the PSE idea come to life
  7. Evaluating outcomes to see what difference it has made.

**Each initiative begins with a common element. The human element. Why the change is important and who it will affect.**

*Angela Ramos is a 25-year-old single mother living in an older, lower income neighborhood in east Fort Worth. The home was left to her by her grandparents. Angela has a full-time job as a bookkeeper for a small construction company. Although her income is steady, she must work a second job at a trendy bar in Fort Worth's Sundance Square to make ends meet.*

*Angela developed upper respiratory issues and chronic infections during her time as a server. Each episode causes her to miss work from both jobs as well as limits her ability to interact with her young son. Her doctor has told her the ailments are related to her exposure to secondhand smoke and will not improve if she continues to be routinely exposed to the irritants. Her choice is to leave a job that allows her to support her family or continue working and face increased health risks and loss of income due to illness.*



**Real World Examples:  
(Don't reinvent the wheel, use the wheel!)**

**Policy: Smoke Free Fort Worth  
Resource: American Cancer Society**

***"Having a little help, helps a lot."***

**~ Julie Johncox Siglinger,  
President, JP Solutions**

While Angela is a fictitious person, her story represents a significant segment of the population that has been affected by secondhand smoke (SHS), that being employees of bars and bingo parlors. Efforts to limit smoking in public places has been somewhat successful in Texas due in large part to the concerted efforts of likeminded groups such as the American Heart Association, American Lung Association, and American Cancer Society partnering with other groups at the local level like Healthy Tarrant County Collaboration.

For these national groups to be successful at the local level, however, there needed to be a local representative. Someone familiar with the lawmakers in the Fort Worth/Tarrant County arena to whom they could easily relate. Enter Julie Johncox Siglinger, a freelance consultant hired by the American Cancer Society to spearhead the Smoke Free Fort Worth initiative in 2015. Julie has extensive experience working with local community's development and has worked with policymakers at the federal, state, and local levels. She is a perfect example of a key element of a Policy, System, and Environmental (PSE) change agenda: having the right person for the job.

Previous assessments of public concern in Fort Worth found the subject of a smoking ordinance to be somewhat flat. Much of the public knew or cared little of the topic as it related to employees of bars. Opponents to any regulation (bar owners such as Billy Bob's Texas, cigarette vending machine companies, etc.) were vehemently against a smoking ordinance as they felt it would hurt their businesses, having prevented a similar ordinance to pass 10 years prior to the current one. A reassessment in 2015 by Julie found much the same results. Building on the existing data that included a short list of current political supporters and organizations coupled with a longer list of allies and potential supporters, a new campaign plan was established that would raise public awareness of the dangers arising from secondhand smoke (SHS).

The message had to be clear, though. This was a public health initiative. It was not an effort to stop the public from smoking, keep businesses from selling tobacco or vaping products, or for people to change their health habits. This initiative was about workers' rights to have a smoke free environment for their own health, thus making it primarily a policy system change. The philosophy was that of, "an employee should not have to choose between a paycheck or their health."

The new campaign strategy used multiple mediums to deliver their awareness message.

- Tapped into local board members for support
- Adopted outreach to local health groups and those affected by SHS to build support
- Utilized evidence-based information related to the impact of secondhand smoke and raised community awareness on the benefits of smoke free air
- Collaborated with other groups attempting the same or similar policy change to reduce competition of resources, thereby increasing the monetary abilities for all parties

The campaign also took advantage of a shift in the political attitude related to a smoking ordinance.

- Billy Bob's Texas had a change of management and environment, going smoke free on its own. The new management became an ally as opposed to an adversary
- Mayor Betsy Price, who is pro-business and health conscious, came on board as well as Blue Zones Project fostering a health-conscious attitude at the local level

On March 12, 2018, after two and a half years of effort, Fort Worth joined over 900 cities nationally with a comprehensive smoking ordinance.

# SMOKE-FREE FORT WORTH

## THANK YOU

to the Fort Worth City Council  
for supporting smoke-free workplaces

## FOR EVERYONE IN FORT WORTH.



*After several months with a smoke free working environment, Angela's health has improved. She no longer has lingering upper respiratory issues and has become engaged to her longtime boyfriend. They are now thinking of their health for the future.*

*At a routine annual physical with her primary care physician, Angela's doctor asked her if she would participate in a questionnaire. The questionnaire is designed to highlight her future health needs and to address existing ones that will allow her to live a healthy lifestyle, a benefit should she choose to become pregnant.*



**Real World Examples:  
(Don't reinvent the wheel, use the wheel!)**

**Systems: One Key Question®  
Resources: JPS Health Network Health  
Center for Women &  
Tarrant County Public Health**

***"Nothing happens if you don't have  
relationships with people"***

**~ Ann Salyer Caldwell, Deputy  
Director Tarrant County Public  
Health**

The infant mortality rate in Tarrant County has historically been disproportionately higher than other large counties in Texas. This statistic was no different in 2014. Although Tarrant County Public Health (TCPH) had been actively addressing the causes surrounding infant mortality for many years, it needed more data to determine where and how an intervention would benefit those effected. A key data point found that women who had unplanned pregnancies had a higher rate of poor outcomes. This became a target population for TCPH and its partners.



Relationships are yet another example of how networking and partnerships enable change. Ann Salyer Caldwell knew Pat Aldridge and Amanda English, which led to the project being spearheaded at JPS Health Network, the safety-net hospital in Tarrant County. Amanda was already participating with the Infant Health Network initiatives when it received a small grant to investigate infant mortality in the county. The alignment of funding, initiatives, and partnerships led the group to develop a plan of action.

Not to "reinvent the wheel," TCPH had been using the model of One Key Question® within their HIV community as a vehicle to "open the conversation". (One Key Question®, 2018) One Key Question® begins simple enough: when a woman sees her primary care physician she is asked, "Do you plan on becoming pregnant in the next year?" Depending on the answer (yes, no, or maybe) the physician could then direct the woman on how to proceed with her health options, whether that be contraception or addressing existing/potential health concerns that could endanger her pregnancy or child. The initial target population was women age 18-44.

JPS was a logical choice for the pilot program as it delivers more than 5,000 babies every year and has an integrated system with more than 40 locations throughout Tarrant County. JPS had



to work past its own challenges, however. Through internal environmental and cultural changes the hospital had reached a time when it was very open to an effort such as One Key Question®.

Although the plan may appear simple, it is important to understand that when dealing with public health initiatives solution plans are complex, somewhat like a jigsaw puzzle. Putting a puzzle this large together is rarely easy. The steps taken by this group of partners included:

- Determining the target population and what visit type would best suit the query
- Finding their champions within the medical field – providers to promote system changes and coordinate promotion efforts and training among other providers
- Creating an interactive electronic questionnaire that would collect quantitative data
- Working with the IT department to develop the algorithm needed for that data collection
- Determining the target locations and then into expand the program to all JPS Community Health Clinics



### **One Key Question®**

The One Key Question® program celebrated its one-year anniversary in September 2018. Tarrant County's infant mortality rates have been improving, however the data has yet to show what impact the One Key Question® has had on those rates. It takes three to five years for measurable outcomes from PSE strategies to be seen. Any benefit, however minor, is still an improvement.

The most recent numbers from the Texas Department of State Health Services released in 2017 (for 2015) showed a dramatic improvement in infant mortality within the county. For the first time ever in the county's history the rate was 6.17 infant deaths per 1,000 live births, down from 7.22 in 2014 ([access.tarrantcounty.com](http://access.tarrantcounty.com)).

*Angela has now married and she and her husband are planning for a family.*

*Angela has been living in her grandparent's home since they passed away. She is now working on an active healthy lifestyle. Part of her goals are to create a healthier diet for her growing family. She faces difficulty in this area as there is not a grocery store in her neighborhood that is convenient to where she lives and works. Additionally, Angela is 4 months pregnant.*



**Real World Examples:  
(Don't reinvent the wheel, use the wheel!)**

**Environment: Healthy Corner Store  
Program  
Resources: Healthy Tarrant County  
Collaboration**

***"The face of the project needs to be  
the face of the community"***

**~ Linda Fulmer, Executive Director,  
Healthy Tarrant County  
Collaboration**

Balanced nutrition and physical activity are critical components for sustaining optimal health. The lifestyle habits we create are fostered by the strength of our environment and our environment begins in our community. It is important we take time to invest in our community. By doing so, we become invested in the overall success of initiatives piloted within that community. Ramey Market, set in the historical yet underserved Stop Six Community in East Fort Worth, TX, is just such an example of investing in the community.

During 2014, HTCC surveyed members of the community. The feedback gathered focused on what community members felt was most important for reducing chronic disease disparities. The members identified access to healthier foods as a top priority. In 2015, HTCC was awarded the Plan4Health grant, which provided money to transform a convenience store into a healthy corner store. Ramey Market had been identified as an ideal location, but the existing owner was reluctant to become involved. In 2016, however, Ramey Market sold, creating an opportunity for HTCC to initiate discussions with the new owners on the idea of converting the market into a healthy corner store.

Another example of how to connect with a community is by involving familiar faces. People who are "relatable". The corner store conversion talks became a reality after HTCC hired Shae Roundtree, to lead the talks with the new owners. Shae became the face of the project because people in the community respected her. She had been selling advertising for the *Star-Telegram* and *Dallas Morning News* for 30 years and the Stop Six community was part of her territory. During the Ramey Market conversion, discussions took place with stakeholders about the possibility of having the Dunbar High School students design and paint a mural on the East wall of the store, as a means of rebuilding a formerly burned bridge between the store and the community. The discussions were a success and the design selected commemorated the store, the school, the community, and healthy fruits and vegetables. In November and early December

students spent their art class period working on the mural. A grand unveiling was held in December 2016 and the rest, as they say, is history.

The conversion of Ramey Market may appear to have been a relatively straight forward initiative, however, it was a success because of the relationships established between the Stop Six Community and collaborating partners.

- In 2015, Blue Zone Project staff members approached the owner of Ramey Market about converting to a healthy corner store, but the owner would not move forward.
- Blue Zone Project staff decided to pursue a different community after being met with resistance. Shortly thereafter, Ramey Market sold, and this opened a door for Blue Zones Project and HTCC to pursue Ramey Market again in a collaborative manner.
- HTCC learned through collaboration with community partners that Ramey Market was not well regarded in the community owing to the way the previous owner treated customers. This information led HTCC to hire Shea Roundtree to be the face of the project.

Ramey Market continues to thrive and serve the community as a hub for fresh fruit, vegetables, and canned items. The conversion of the market will celebrate its two-year anniversary in December 2018. The success of the Ramey Market conversion allowed HTCC to duplicate their approach in three additional communities within Tarrant County.



*Angela was able to take advantage of the healthy corner store in her neighborhood. It has had a positive impact on her health and that of her family as well. Angela had the resources to better manage her health concerns and delivered a healthy baby girl.*



**Real World Examples:**  
**(Don't reinvent the wheel, use the wheel!)**

**PSE in Action: Mother-Friendly Workplace**

**Resources: Tarrant County Public Health**

***If you don't at least try to take the first step, you will never see the impossible become reality."***

**~ Linda Fulmer, Executive Director, Healthy Tarrant County Collaboration**

The benefits of breastfeeding have been well established. Beyond the nutritional value of breastmilk, there has been evidence-based data detailing the reduction of morbidity and mortality rates of breastfed infants. The challenge has been how to assist new mothers in their efforts to breastfeed their babies after returning to work. A Mother Friendly workplace is one that is initiated through policy implementation in conjunction with systems and environmental changes. The policy requires a private space, flexible scheduling for break times and other basic support so that lactating mothers may express and store breastmilk for their babies.

In 2009 Tarrant County Public Health (TCPH) began working on a grant application aimed at infant mortality prevention efforts across Tarrant County. One of the proposed strategies included local policies to increase breastfeeding rates. A few years later, the Texas Department of State Health Services awarded a grant for a pilot project aimed at improving the existing Mother Friendly Workplace toolkit. The grant was awarded to several recipients, two of which were TCPH and JPS Health Network. TCPH was awarded the grant as an employer pilot and JPS was awarded the grant as hospital pilot. These pilot grants provided TCPH and JPS a unique opportunity to fully work through the process of creating comprehensive Mother Friendly policies and programs.

Following the grant approvals, Tarrant County worked to become the first county to be Mother Friendly Workplace certified across all its operating departments and divisions. This success set the stage for the Healthy in All Policies resolution which was later passed in Tarrant County Commissioners' Court in 2014. The milestone resolution placed health considerations on the same footing as economic development and transportation in Tarrant County when looking at new policy, whether at the local, state, or federal level.



HTCC was careful to ensure their efforts were not duplicating the existing efforts of other community organizations and partners. During this time, instead, it sought to expand the lactation support programs to university campuses. An opportunity presented itself when the State received funding from federal grants to improve the existing Mother Friendly toolkit. Dr. Susan Baxley, clinical associate professor at UTA, was a member of the HTCC Steering Committee. Taking advantage of the movement, Dr. Baxley assigned two of her Honors students to conduct surveys, one with students and the other with faculty and staff, to gauge awareness and attitudes about lactation support on campus. The results of the student's findings, once presented in their theses, were given to the administration. The data led to the establishment of a campus-wide lactation support program – one of the first in Texas.

- Both TCPH and JPS began working towards implementing system wide policy level change to create a Mother Friendly Workplace.
- JPS had previously received a deficiency on a Joint Commission review regarding breastfeeding rates, which created an urgency to address this issue.
- At TCPH the pilot champion was Shannon Wingo, manager of the WIC program. At JPS, Pat Aldridge was the pilot champion and she oversaw the department that delivered babies.
- HTCC was indirectly involved in the initiative through ad hoc community outreach efforts to physicians in the community to champion the cause.

Throughout the efforts of this policy change, there was also the continuing efforts of systems and environment change. There is a stigma attached to women breastfeeding, whether that be in a public place or the workplace environment. The efforts to change the mindset of companies and people had to be addressed along with the change of policy. Sometimes this is the harder task to accomplish.



*It is important to the story of Angela Ramos and her family that The University of Texas at Arlington is part of the Mother Friendly Workplace program. Angela now has a job at UTA and is able to express her milk for her growing daughter during her work hours. By having this benefit available to her, she can ensure her baby girl will have a healthy advantage growing up.*

## Conclusion:

The purpose of telling these stories is not just to demonstrate steps of a change process, but to highlight to the reader just how interrelated we all are. Although Angela is a fictitious person, is she really? The issues covered in this paper show there is an Angela in each of us. Our lives intersect and intertwine with one another without our ever really noticing. It is through the steps of Policy, Systems, and Environmental Change Strategies that we can truly see that we are all connected. Whether it is identifying an issue in an urban neighborhood or a downtown mall, we are all in this community together. We owe it to ourselves and our communities to put forth the best efforts we can in solving these issues.

As previously mentioned, Tarrant County Public Health had been aware of and continues to address the issues of infant mortality within the county. Currently, the most recent numbers from the Texas Department of State Health Services show a dramatic improvement in infant mortality within the county. Additionally, HTCC's Healthy Corner Store initiatives have improved the communities it serves by providing greater access to healthy food choices.

Healthy Tarrant County Collaboration and its partners recognize the benefits of utilizing PSE Change Strategies for long-term sustainable change within a community. The steps and processes highlighted can be used to address many health concerns that affect every community, urban or rural, large or small.

The important first step on the road to change is to, *"Start where you are. Use what you have. Do what you can."*

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***Additional thanks to Chris McRobbie for providing original illustrations depicting the fictitious "Angela Ramos" character and for creating the flow chart table which depicts existing PSE Development Framework.***



## Resources:

- Ashe, Arthur. (2018, January). *Quote photograph*. Retrieved May 11, 2018, from Wisdom Times: <https://www.wisdomtimes.com/quotes/author/arthur-ashe/start-where-you-are-use-what-you-have-do-what-you-can/>
- Health Trust. (2017, January). *What is Policy, Systems and Environmental (PSE) Change?* Retrieved June 1, 2018, from Health Trust uploads: [http://healthtrust.org/wp-content/uploads/2013/11/2012-12-28-Policy\\_Systems\\_and\\_Environmental\\_Change.pdf](http://healthtrust.org/wp-content/uploads/2013/11/2012-12-28-Policy_Systems_and_Environmental_Change.pdf)
- Healthy Tarrant County Collaboration. (2018, October). *Our Work*. Retrieved May 1, 2018, from Healthy Tarrant County Collaboration home: <http://healthytarrant.org/>
- Love, K., Mulliniks, K., & Salazar, D. (2016, June). *Tarrant County continues to battle high infant mortality rate*. Retrieved August 28, 2018, from Star-Telegram: <https://www.star-telegram.com/news/local/community/fort-worth/article84880712.html>
- Mother-Friendly Worksite. (2017, November). *What is Mother-Friendly?* Retrieved September 3, 2018, from Texas Mother-Friendly Worksite: <http://texasmotherfriendly.org/what-is-mother-friendly>
- Murray, Carol. (2016, December). *Ramey Market completed mural photograph*. Retrieved August 22, 2018, from American Planning Association blog: <https://www.planning.org/blog/blogpost/9133306/>
- Power to Decide Campaign. (2018, October). *One Key Question®*. Retrieved September 22, 2018, from Power to Decide: <https://powertodecide.org/one-key-question>
- Smoke-Free Fort Worth. (2018, June). *Campaign logo*. Retrieved July 12, 2018, from Smoke-Free Fort Worth: <http://www.smokefreefw.org/>
- Smoke-Free Fort Worth. (2018, June). *Resources*. Retrieved July 14, 2018, from Smoke-Free Fort Worth Resources: <http://www.smokefreefw.org/resources.html>
- Tarrant County Public Health Department. (2017, November). *Infant Mortality in Tarrant County*. Retrieved November 5, 2018, from Tarrant County, Texas: <http://access.tarrantcounty.com/en/public-health/community-health-promotion/fetal-and-infant-mortality-review.html>
- The Food Trust. (2012, January). *What We Do: In Corner Stores*. Retrieved September 18, 2018, from The Food Trust: <http://thefoodtrust.org/what-we-do/corner-store>
- Wade, Brandon. (2016, November). *Ramey Market mural outline photograph*. Retrieved August 18, 2018, from Star-Telegram online: <https://www.star-telegram.com/news/local/community/fort-worth/article118094023.html>