



TASKFORCE SUMMARY REPORT

Public Health, Equity and Transportation Taskforce

November 2018



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This summary report is intended for educational and informative purposes. References or links to specific individuals, organizations or companies have been included solely to advance these purposes and do not constitute an endorsement or sponsorship.

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Public Health, Equity and Transportation Taskforce Summary

Outside of health care and genetics, the largest determinants of health are factors such as behavior, social and economic factors and the physical environment which account for 80% of health impacts.¹ Below are selected national and Colorado social determinants of health.

Transportation-related social determinants of health

IMPACT	 Air Quality	 Obesity	 Injury
NATIONAL	Vehicle emissions contribute a large portion of air pollutants . These pollutants are linked to respiratory illness, cancer and heart disease ¹ .	One of many contributing factors of obesity is time an individual spends sitting in a car , in addition to physical inactivity ³ .	There are over 35,000 annual traffic fatalities ⁵ , resulting in medical and productivity costs for individuals, states and our nation ⁶ .
COLORADO	2015 ozone concentrations along the Front Range have exceeded federal standards, putting many Coloradans at risk for asthma and other respiratory conditions. ²	While Colorado has the lowest national adult obesity rate, the 2015 overweight and obesity rate of children ages 5-14 olds was 27.6% , or 1 in 4 ⁴ .	In 2015, there were 120,723 crashes on Colorado roadways, resulting in the death of 547 Coloradans ² .

Content from factsheet produced by taskforce.

Colorado Department of Transportation (CDOT) understands the importance of the link between public health and transportation. To that end, for the first time, CDOT is including public health and equity in Colorado’s upcoming 2045 Statewide Transportation Plan (SWP). The SWP will focus on the impacts transportation systems have on public health and reducing health disparities such as income, asthma rates and access to health care and jobs. The Colorado SWP will include best practices, policies, health language, data and performance measures related to transportation, public health and historically underserved populations. The 2045 SWP will kick off in February 2019 and will be adopted by 2020. After adoption, CDOT will be one of only a few progressive DOTs such as Minnesota (MnDOT), California (CalTrans) and Washington (WSDOT) who have explicitly addressed public health and equity in their SWP.

CDOT began this process in November 2017 by hiring Safe and Healthy Communities (SHC), a 501(c)3, to conduct a national scan of states that incorporated public health into their statewide transportation plans. In 2018, SHC assisted CDOT with creating and co-facilitating the Public Health, Equity and Transportation Taskforce. This taskforce was made up of about 30 public health and transportation professionals from different local,

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regional and state organizations and agencies. The taskforce members had expertise in public health, transit, walking, bicycling, statewide transportation, equity, environmental health and other issues that can impact the health of all Coloradoans, especially rural areas, low-income households, communities of color and the growing aging population. The taskforce members agreed upon the goal, objectives and action steps that directed proceeding meetings.

Goal: The Public Health, Equity and Transportation Taskforce will provide guidance and direction on how to best incorporate public health and equity into Colorado’s 2045 Statewide Transportation Plan.

The taskforce met four times for 2-3 hours each meeting from May 2018 through August 2018. The first meeting centered on cross-disciplinary education, reviewed taskforce goal and objectives, crafted a public health definition and discussed how other leading DOTs have included health and equity in their SWP. One taskforce member stated: “[this is] the first time in a long time going to a meeting and I hardly know anyone” which emphasized the importance of this collaborative effort between disciplines. The second meeting focused on defining equity and reviewing equity language and policies from CalTrans and MnDOT’s SWPs. During the third meeting, the taskforce analyzed health and transportation data, developed a public health and transportation vision statement and revised the newly created, Public Health and Transportation Factsheet. The final meeting addressed health and transportation performance measures; appropriate health and equity language to use in the SWP; CDOT’s research called, Crosswalk from Leading States and Colorado; and next steps for the taskforce.

TASKFORCE VISION STATEMENT

Transportation systems impact public health, therefore, CDOT commits to consider statewide transportation policies and infrastructure improvements that maximize the health and safety of all people.



Vision Statement developed by taskforce for use in CDOT’s Statewide Transportation Plan.

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Taskforce Members

Aaron Willis, CDOT Statewide Planning
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Wade Buchanan, Colorado Senior Advisor on Aging
Web Brown, Colorado Department of Public Health and Environment



Best Practices

Objective 1: Identify best practices in other states that are relevant and applicable to CO.

- a. Review the states with the most public health and equity elements in their plan i.e. Washington, Minnesota, and California.
 1. Caltrans and now CDOT created a Health, Equity and Transportation Taskforce with over 30 individuals from cross-sector state, regional and local departments and organizations.
 2. CDOT is considering developing a report similar to MnDOT's *Advancing Transportation Equity*⁷, in conjunction with the CDPHE Office of Health Equity (OHE) who recently completed a report called *Colorado Equity Action Guide*⁸.
 3. Similar to MnDOT, CDOT plans to include a Healthy Communities chapter/ technical report and include public health language, data, performance measures, and policies throughout the CO SWP.
 4. CDOT will identify other modeling tools like CalTrans's Integrated Transport and Health Impacts Model (ITHIM) that can perform integrated assessments of the health effects of transport scenarios and policies at the urban, national and state levels.
 5. MnDOT, CalTrans and now CDOT approach the SWP using a public health and equity lens, also referred to as Health in All Policies (HiAP).
 6. CDOT is considering core goal(s) similar to that of CalTrans, whose core goal #5 is "Foster livable and healthy communities and promote social equity".
 7. Based on the review of CalTrans, MnDOT and WSDOT's SWP and Federal Highway Administration (FHWA) and USDOT related objectives, CDOT will consider, among others, the following health and transportation issues in their SWP:
 - Promoting safety across all modes of transportation
 - Improving air quality and reducing transportation-related air pollution
 - Conducting research on the role transportation plays in improving quality of life
 - Advancing social equity by improving access to jobs, health care, healthy food sources, and community services
 - Creating additional opportunities for walking, biking, public transportation, and ride and vehicle sharing
 - Identifying infrastructure that supports or hinders transportation to human services
 - Reducing the severity and number of obesity cases through more walkable communities, Complete Streets policies, and livability goals

Policies

Objective 2: Identify policies in other states and within Colorado that support the link between public health, equity and statewide transportation.

- a. Review the states with the most public health and equity policies in their plan i.e. Washington, Minnesota, and California.
 1. Taskforce reviewed equity language and policies from other SWPs and provided feedback on how to apply these policies in CO.
 2. CDOT developed, [Crosswalk from Leading States and Colorado](#), that compares CO's SWP and those of leading DOTs to identify potential gaps. Potential improvements identified through this process are developing a cost-benefit analysis that includes public health criteria, addressing climate change impacts of transportation and establishing a statewide trip reduction program.

- b. Consider policies in CO that support or have a potentially negative impact on public health and equity in statewide transportation.
 1. Taskforce recommends CDOT ensure policies use appropriate language in SWP such as “historically under-represented”, “historically excluded”, “historically disenfranchised” (defined as, marginalized, excluded, disqualified) in place of words or phrases such as “poor”, “minorities”, and “disadvantaged” (defined as, needy, destitute, poor, lacking).
 2. Taskforce recommends CDOT ensure SWP explicitly focus on the needs of the aging population, people with disabilities, rural health issues, low-income residents, and communities of color.

- c. Identify existing and new policies that support link between public health, equity and statewide transportation such as:
 - Safe Routes to School
 - Complete Streets
 - Positive economic impact
 - Reducing traffic congestion
 - Improving or maintaining environmental quality, specifically air quality, and greenhouse gas emissions
 - Growing aging population
 - Obesity, cardiovascular disease and physical activity
 - Lowering individual or societal healthcare costs
 - Reducing auto dependency

Education

Objective 3: Provide education and adopt appropriate definitions for public health and equity and advise how to include definitions in the SWP.

a. Education

1. Statewide transportation planning [presentation](#) by Aaron Willis, CDOT.
2. Public health and other leading DOT initiatives [presentation](#) by Karen Roof, Safe and Healthy Communities (SHC).
3. Equity [presentation](#) by Sarah Hernandez, CDPHE.
4. Reviewed public health definitions from CDC, Robert Wood Johnson Foundation and American Public Health Association.
5. Developed [educational factsheet](#) on the connection between equity, public health and Colorado statewide transportation.



b. Created and adopted a definition of “public health”.

Public health works to prevent disease, protect, and prolong life through organized efforts and informed choices by all people in the communities where they live, learn, work, and play.

c. Adopted a definition of “equity” identical to CDPHE’s new definition.

When everyone, regardless of who they are or where they come from, has the opportunity to thrive. This requires removing barriers like poverty and repairing injustices in our education, health, transportation, and criminal justice systems, among others.

d. Created and adopted vision statement for transportation, public health, and equity.

Transportation systems impact public health, therefore, CDOT commits to develop equitable statewide transportation policies and infrastructure that maximize the health and safety of all people.

e. Assist the Metropolitan Planning Organizations (MPOs) with integrating similar definitions.

1. Aaron Willis provided Colorado’s five MPOs (required in urban areas with population of 50,000 or more) with an overview of the taskforce goal and objectives at their monthly meeting in July 2018 and will provide another update on final recommendations and deliverables in November 2018.

Data

Objective 4: Determine what public health, transportation and equity data are needed for the SWP.

- a. Identify existing and potential statewide data related to public health, equity and transportation that has not been previously used or considered such as:
 - Pedestrian, bicycle, and transit counts
 - Location of health centers
 - Medical transportation options in rural areas
 - Transportation infrastructure (including sidewalks, bike trails, etc.) in historically underserved neighborhoods
 - First and last mile connections from transit
 - Perceived and actual safety for transportation users
 - Distribution of aging population
 - Tree canopy coverage
- b. Work with CDPHE, CDOT and other agencies and organizations to understand the types of available data.
 1. CDOT Transportation Data [demo of CDOT's OTIS site](#) by Nicholas Mesenbrink, CDOT GIS Analyst.
 2. CDPHE Data Overview [presentation](#) by Devon Williford, CDPHE, GIS Unit Program Manager.
- c. Identify and prioritize the more accessible equity and transportation data.
 1. Analyze the percentage of Coloradans with no access to a vehicle by demographics today and in the future.
 2. Compare crash data, fatal and serious injuries for pedestrians, bicyclists and vehicles by demographics.
 3. Compare air pollution, asthma, diabetes rates, vehicle miles traveled (VMT) and proximity to people.
- d. Identify the connections and challenges between disparities and the transportation system from both the infrastructure and policy perspectives.
 1. Review CDOT's [Environmental Justice language and policy](#). There are many challenges to understanding equity, so CDOT decision-makers and staff should take [implicit bias test](#) for better self-awareness of biases.
 2. Consider Return on Investment (ROI) when prioritizing equity and public health that can improve decision making by saving taxpayers money and improving outcomes i.e. transportation access to jobs vs. poverty.
 3. Address challenges to integrating health and transportation data i.e. difficulties merging datasets, need to recalculate data by census tract or at county level, some datasets do not include children.

OUTCOMES & ACCOMPLISHMENTS

- e. Identify pertinent statewide data and resources that support health, transportation, equity and performance measures:
- [Colorado Health IT Roadmap](#)
 - [E-Health and the Rural Health in Colorado 2018 Report](#)
 - [Housing and transportation affordability index](#)
 - [Walk Score](#)
 - [AARP livability index](#) scoring system for housing, transportation and other key indicators with a focus on aging population
 - [DRCOG's Regional Planimetrics Project](#) upcoming 3D model of the region's built environment
 - [CDPHE's Colorado Equity Action Guide](#)

TRANSPORTATION ACCESS IS AN EQUITY ISSUE



EQUITY is when everyone, regardless of who they are or where they come from, has the opportunity to thrive. This requires eliminating barriers like poverty and repairing injustices in systems such as education, health, criminal justice and transportation.⁹

Access to transportation can be an equity issue. Transportation can help or hinder people from making healthy lifestyle choices, such as accessing medical visits, employment and healthy food.



For households that do not have a vehicle or younger and older individuals who are unable or choose not to drive, improved modal access like biking, walking and transit is essential.



In 2015, **5.5%** of all households in Colorado did not have a car, compared to **14.8%** of all Black households.²

Content from factsheet produced by taskforce.

Resources and Performance Measures

Objective 5: Identify statewide resources and performance measures that can support public health, equity and the ‘quality of life’ priority in the SWP.

- a. Determine pertinent statewide resources for performance measures such as:
 - CDOT Performance Objectives i.e. Policy Directive 14 (move Colorado toward zero deaths by reducing traffic-related deaths and serious injuries by one-half by 2030)
 - CDPHE Performance Measures i.e. air quality measures
 - Measure What We Value: Policies to prioritize public health and build prosperous regions, Performance Measures to Better Assess Project Benefits¹⁰
 - Brown Complete Streets Policies¹¹
 - Massachusetts DOT [performance measures](#)
- b. Identify performance measures from public health, equity and transportation to include in SWP.
 1. Basics of performance management [presentation](#) by Darius Pakbaz, CDOT Performance Data Manager.
 2. Colorado performance measures [presentation](#) by Aaron Willis, CDOT. Per recommendation of taskforce, CDOT is considering the FHWA and CDC outline and selected example measures in the table on page 10. CDOT must first determine what data is available, use the data to identify any trends, and then set performance measures.
- c. Decide how to frame the public health and transportation work in a ‘quality of life’ context.
 1. Taskforce recommended the following revisions (in parenthesis) to CDOT’s proposed language about quality of life.

CDOT envisions a transportation system that is capable of enhancing quality of life by providing travel choices that conveniently get people to work, school, shopping, and recreation areas, and connect people with the goods and services (we) need. Determinants of quality of life that relate to transportation include (health of people and the environment), (equity), (affordability), safety, and the ability of (“Coloradans” or “the traveling public”) to access essential services.

OUTCOMES & ACCOMPLISHMENTS

Potential CDOT performance measures

THEME	DESCRIPTION	MEASURE
Active transportation	Support people to be more active and provide more options for people to get places safely to improve health.	Actual or forecast increase in non-motorized mode share or minutes spent biking or walking.
Safety	Motor vehicle crashes are one of leading causes of death in the US. By providing transportation options and improving roadway facilities, agencies can reduce the incidence of motor vehicle crashes.	Rate and number of fatalities and serious injuries (CDOT's Policy Directive 14), economic impact of crashes, and number of fatalities involving motorized vehicle collisions with pedestrians and bicyclists.
Cleaner Air/ Environmental Health	Air pollution may contribute to the incidence of heart disease and respiratory illnesses, including asthma. Improved system efficiency and supporting cleaner vehicles and fuels can improve air quality.	Vehicle miles traveled per capita at state or urbanized area level, proximity to major roadways at state or metro area level, and annual greenhouse gas emissions from the transportation sector.
Connectivity	Providing a well-connected, multi-modal transportation network that increases people's ability to access destinations such as jobs and parks that can influence health and well-being.	Access to and quality of transit, emergency vehicle response and care in rural areas, public transportation trips per capita at state or urbanized urban area level, annual transit on-time performance, and rate of drive-alone trips.
Equity	Negative health effects related to transportation system often fall on traditionally underserved members of community, such as low-income residents, communities of color, children, and older adults.	Commute mode share by demographic at state or metro area level, social isolation data (those living alone), proximity to major roadways by demographics, annual percentage of people of color and women in CDOT's workforce, percentage of state's communities whose span of transit service meets the minimum guidelines each year.

Taskforce Next Steps

This report identifies many next steps and recommendations of which a few are highlighted below that were developed by the taskforce to guide the process of incorporating health and equity into the 2045 SWP. CDOT staff plan to reconvene the taskforce in early 2019 to revisit this work.

Next Steps and Recommendations

1. Ensure more inclusive and appropriate terms are defined and used in the Colorado SWP.
2. Develop roles and responsibilities across agencies and organizations to ensure clarity and collaborative approaches.
3. Identify a methodology to include a system-level analysis of disproportionate impacts on historically underserved populations.
4. Develop additional educational factsheets i.e. taskforce and its outcomes, explanation of SWP content, transportation for specific groups (i.e. rural areas, aging population).
5. Collect, integrate and analyze health and transportation data and performance measures i.e. number of people walking and bicycling.
 - a. Ensure data is transparent and easily accessible information to the public.
6. Conduct equity and public health training for the CDOT leadership, including the transportation commissioners.
7. Assist with where and what health and equity definitions, policies and language should be included in the SWP and technical reports.
8. Finalize and adopt the proposed 'quality of life' description for the SWP.
9. Prioritize and address gaps identified in the Crosswalk Analysis.

NEXT STEPS

Significant work was accomplished by the taskforce in a short period of time. CDOT is shifting and collaboratively working with new partners in deliberate ways to better ensure public health and equity are important additions to the 2045 SWP. CDOT's forward-thinking and comprehensive approach is further apparent by the department's plans to hold a peer exchange meeting in 2019. The peer exchange will include representatives from the other leading DOTs and the taskforce to discuss best practices and lessons learned.

These initial four taskforce meetings represent a foundational effort for the development of CDOT's 2045 SWP. The taskforce highlighted the need to ensure access to reliable, safe, cost-effective transportation choices that support a good quality of life for all Coloradans. The taskforce's work emphasized the importance of focusing on the movement of people rather than vehicles; increasing active and public transportation options for all; and leveraging transportation to connect people to jobs, schools, health-care, family and friends, healthy food, shopping, places of worship, recreation, and entertainment. With a growing and aging population in Colorado, younger Coloradans choosing to drive less, and rising transportation costs, increased multimodal options are needed along with improvements in the availability of information about transportation services. One taskforce member stated, "Here is our moment [in Colorado] when transportation can significantly improve lives." CDOT's 2045 SWP will not only promote safety, strengthen the economy, and protect the environment, but also explicitly promote public health and equity.



Content from factsheet produced by taskforce.

References

- 1 <http://onlinepubs.trb.org/>
- 2 https://www.colorado.gov/airquality/tech_doc_repository.aspx?action=open&file=2015AnnualDataReport.pdf
- 3 https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf402311
- 4 https://www.colorado.gov/pacific/sites/default/files/DC_CD_fact-sheet_Childhood-Obesity.pdf
- 5 <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/812453>
- 6 <https://www.cdc.gov/vitalsigns/crash-injuries/index.html>
- 7 <http://www.dot.state.mn.us/planning/program/advancing-transportation-equity/ - ->
- 8 <https://www.colorado.gov/pacific/cdphe/equity-action-guide>
- 9 Colorado Department of Public Health and Environment (CDPHE), Office of Health Equity
- 10 <http://t4america.org/wp-content/uploads/2017/02/Healthy-MPOs-Policy-Paper-web.pdf, page 15>
- 11 <http://thenationshealth.afppublications.org/content/48/6/1.3>