Electricity and Natural Gas TAG Persona: 3

Strategy: **Behavior Change and Educational Efforts**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Implement time of use / dynamic rates programs, including user educational efforts, supported by smart meters	2015-2020			
Educational efforts through social media, applications, competitions (try individual and neighborhood scale competitions) and exposure/Media campaigns using local celebrities to drive behavior change	2015-2020			
Utilizing meter reads and bill format/presentation to influence behavior. Present energy use in actionable and more timely formats/ways to customers.	2015-2020			
Promote programs for individuals to manage their own carbon footprint (carbon diet)				
Neighborhood EE projects -neighbor vs neighbor efficiency challenge. Customized for neighborhoods.				
Increase transparency of energy cost information to tenants and prospective tenants in multi-family and commercial dwellings				

Electricity and Natural Gas TAG Persona:

Strategy: **Utility Business Models**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Begin transition to a service-based utility model (including reduced reliance on volumetric rates), consider forming an expert panel with representatives from all utilities in the region and consumers • Include analysis of: Rate structure, Value-based rates, Time of use rates, etc.				
Micro-grid; nodal systems (ex. Fort Collins) (NOT YET DISCUSSED BY TAG)				
Lower bills (not just lower rates), define affordability (NOT YET DISCUSSED BY TAG)				
Distributed ISO: paid for optimizing distributed grid and integration with transmission and DERS; including over improving comms and pricing resolution system (NOT YET DISCUSSED BY TAG)	2020-2030			
And DERs financier (competing vs. 3rd parties) (NOT YET DISCUSSED BY TAG)				

Electricity and Natural Gas TAG Persona:

Strategy: **Building Energy Reductions Through Efficiency and Demand-Side Management**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Increase meter reading frequency and use the information to identify opportunities for utility action and for user usage choices (O:4, T: 7, CE: 8)	2015-2020			
Educate builders and code inspectors to gain higher compliance with new energy codes as they're implemented every 3 years (O:4, T: 10, CE: 10)	2015-2020			
Increase funding for energy efficiency rebates; new offerings or higher amounts may attract new customers (O:4, T: 10, CE: 6)	2015-2020			
Explore new financing mechanisms: • on-bill repayment, • implement a PACE program and others; • mechanisms targeted at promoting/enabling RE and EE, (O:3, T: 8, CE: 9)	2015-2020			
Automated demand response for all technologies (O:5, T: 9, CE: 8)	2015-2020			
Identify high energy users in all sectors; create a new minimum standard for building energy use; enforce the new standard (O:10, T: 6, CE: 10)	2020-2030			
Enhanced sub-metering for demand response (O:5, T: 5, CE: 8)	2020-2030			
Transition the AE Energy Efficiency program and codes to a performance model + measurement and verification; program customers would be incentivized to meet targets. (includes passive design elements, (O:7, T: 6, CE: 7)	2020-2030			
Specific strategies: Envelope improvements (biggest impact), Lighting (LEDs), HVAC, Water heating, Plug loads				
Coordinated effort with AWU to reduce energy use and carbon intensity associated with consumption, treatment, and delivery of water, including peak shifting				
Programs to reduce energy use and carbon intensity associated with water consumption				

Electricity and Natural Gas TAG Persona:

Strategy: **Building Energy Reductions Through Efficiency and Demand-Side Management**

Require submetering in new commercial office space				
Consider the potential for net-zero new construction of residential and commercial buildings	2030 - 2050			
Set a goals for reducing energy use intensity for residential and commercial buildings	2030 - 2050			
Incorporate recommendations for passive solar subdivision and street/lot orientation into the land development code				

Electricity and Natural Gas TAG Persona:

Strategy: **Generation Technologies**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Prioritize investment in zero carbon resources at utility and/or customer scale; regular evaluation of generation technologies • Utility-scale solar and distributed solar • Utility-scale wind (inland and coastal)	2015-2020			
Expand community solar	2015-2020			
Ongoing analysis of cost effectiveness and technical feasibility of all potential generation resources. • Analyze further investment in combined heat and power as a generation option • Analyze whether biomass is a viable generation option in the future • Analyze whether geothermal is a viable generation option in the future • Analyze whether nuclear is a viable generation option in the future	2020-2030			
Explore and pilot storage options with grid functionality* • Solar with storage • Wind with storage	2020-2030			
Demand Response/Smart Grid/Intelligent Energy Management Systems (to further enable intermittent resources) * (NOT YET DISCUSSED BY TAG)	2015-2020			
EV stack – ensure coverage (NOT YET DISCUSSED BY TAG)				
Phase out use of carbon-emitting electric generation (NOT YET DISCUSSED BY TAG)	2020-2030			
Advocacy - work to drive down CO_2/MWh intensity of local ERCOT node (NOT YET DISCUSSED BY TAG)				
Solar hot water (NOT YET DISCUSSED BY TAG)				
Stimulate market: pre-paid and partially pre-paid multi-function storage: hot water heater extended reservoirs, larger pads for battery-powered lawn mowers, weed wackers, chainsaws, etc. (NOT YET DISCUSSED BY TAG)				
Concentrating solar; hybrid with existing (NOT YET DISCUSSED BY TAG)				
Eliminate life-cycle of fracked gas emissions (NOT YET DISCUSSED BY TAG)				
Investigate potential to purchase non-fracked gas or gas with leakage controls (NOT YET DISCUSSED BY TAG)				

* These technologies require maturation and might not be commercially available and/or still have barriers to widespread adoption and integration into the grid

Materials Management

3

Strategy: **Purchasing**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Promote specs which emphasize: * Material Reuse * Reduced Packaging * Materials with Recycled Content * Locally Manufactured Products	2020-2030			
Develop a marketing campaign which promotes responsible purchasing	2020-2030	Maybe		
Encourage retailers to sell products with LCA considerations	2030-2050			
Increase co-op purchasing to reduce packaging waste	2020-2030			
Shift from purchasing products to purchasing services	2020-2030			
Refine COA construction and building specs to accept reclaimed materials	2015-2020			

Materials Management

Strategy: **Methane Management**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Encourage participation in EPA landfill methane outreach voluntary programs	2020-2030			
Encourage use of effective daily landfill cover	2020-2030			
Increase COA Landfill gas capture and combustion	2015-2020			

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Materials Management

Strategy: **Reduction and Reuse**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Expand reuse and sharing opportunities by supporting existing reuse centers and fostering development of additional formal community centers	2020-2030	LI - yes ~~(cost)~~ save $ M-HI - yes - ideas save $	Y	Cost, time
Incentivize deconstruction and construction material reuse	2020-2030	LI - yes - jobs	N	political
Promote minimization of material use in home construction (such as with prefab components) and design of durable goods (such as appliances)	2020-2030			
Promote products and packaging with multi-uses and purposes (as an alternative to single-use products)	2020-2030	Yes (all) - save $	N	availability
Promote consumer support for durable, long lasting products	2030-2050			
Incentivize reducing the generation of fats, oils and grease and their beneficial reuse	2020-2030			
Pre-sort at transfer stations or landfills	2020-2030			
COA departments conduct waste audits, identify and promote waste reduction opportunities in City operations, purchasing, events, etc.	2015-2020			
Add 4 new COA Reuse Centers	2015-2020			
Expand reuse opportunities: • Re-Made in Austin (Reuse Austin) • Austin Materials Marketplace	2015-2020			
Expand reuse opportunities: • Creative Reuse Centers • Teachers Reuse Center • Building material reuse center	2015-2020	Yes - artists, teachers	N	
Expand repair opportunities: • Appliances, bicycles, electronics, apparel, furnishings	2015-2020	LI - yes - save $ Jobs M-HI - yes - save $	Some	
Clean Austin - Salvage reusable items (repurpose Todd Lane transfer station)	2015-2020			
Reduce single-use products: Single-Use Carryout Bag Ordinance	2015-2020			
Reduce single-use packaging: Refundable Deposit (bottle bill)	2020-2030	Yes (all) LI - jobs	N	
Expand Retail Take-back: HHW, rechargeable batteries	2020-2030			
Promote COA Recycled Reads	2015-2020	LI - yes - save $	Y	

Materials Management

Strategy: **Recycling**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Create decentralized community centers for recycling	2030-2050	yes (all) - time + convenience	N	
Single-stream Recycling • Add materials (2013: aluminum foil and pie pans, 2014: rigid plastics) • Increase to weekly service	2015-2020			
Strengthen Pay-As-You-Throw rate structure incentive	2015-2020	yes - save $ Single-family & up to 4-plex	Y some	
Clean Austin (ARR residential service) • Increase recycling • Add on-call service for bulk items	2015-2020	〃	〃	
Increase convenience & efficiency: Public-area recycling containers	2015-2020	yes - convenience	N	
Increase convenience & efficiency: CBD alley collection service	2015-2020			
Add 4 new Austin Reuse Centers for hard-to-recycle materials	2015-2020			
Expand Austin Green Business Leaders	2015-2020			
Offer commercial recycling rebate	2015-2020			
Offer Business Outreach: • Technical assistance • Reward, recognition	2015-2020			
Implement Universal Recycling & Composting Ordinance	2015-2020	yes - convenience		
Develop C&D Recycling Ordinance	2015-2020	LT - yes - jobs		
Develop Special Events Ordinance	2015-2020			
Advocate for CESQGs inclusion in HHW program	2015-2020			
Develop, market: • (Re)Manufacturing Hub • Austin Materials Exchange	2015-2020	LT - yes - jobs		
Develop, market ReBlend	2015-2020	LT - yes		
HHW - Add: • North Austin HHW facility • Door-to-door HHW collection	2015-2020	yes - convenience		

Materials Management

Strategy: **Organics Diversion**

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Universal organic diversion – collect not only food residuals, but also, other organic, non-recyclable materials from all sectors	2020-2030	Yes - Save $ (if pay as you throw)		
Promote community and regional farming and urban agriculture to use and produce compost (close the loop: consume, compost, grow, produce, consume)	2020-2030	Yes - save $, health		
Encourage state to ban disposal of yard trimmings	2020-2030			
Expand Infrastructure for FOG (Fats, Oils and Grease) beneficial reuse	2020-2030			
Implement 2-bin wet/dry collection system for residuals	2030-2050			
Conduct compost training: • Junior composter • Master composter	2015-2020			
Offer rebates for residential and on-site commercial composting	2015-2020			
Expand residential organics collection (yard trimmings, brush, food scraps)	2015-2020			
Provide on-call brush collection	2015-2020			
Storm-ready Austin – storm debris management program	2015-2020			
Transition Hornsby Bend compost operation ('Dillo Dirt) from yard trimmings to clean lumber or other bulking agents and carbon sources from City contractors and other City departments	2015-2020			
Business Outreach • Technical assistance • Reward, recognition	2015-2020			
Offer Commercial composting rebate	2015-2020			
Add organics to CBD alley collection service	2015-2020			
Implement Universal Recycling & Composting Ordinance	2015-2020			
Develop C&D Recycling Ordinance	2015-2020			
Develop Special Events Ordinance	2015-2020			

Transportation

Persona: 3

Strategy: Vehicles and Fuel Efficiencies

Action Categories

- Electric Vehicle
- Alternative Fuels
- Increase Fuel Economy

Actions	Timeframe	How it would benefit you if implemented	~~Currently doing this, affects you~~ (Y or N)	Barriers (Cost, convenience, time, other)
E A5 - Improve Austin's transportation and economic connections between other major cities in Texas by supporting the construction of a high speed rail network	2020-2030	LI w/k - ~~yes~~ } options LI w/o k - ~~yes~~ M-HI - yes - time $	N	
Purchase lower emission vehicles to replace older, higher-emission vehicles	2015-2020	LI - no M-H - meet ideals	N, N, Y	cost
Purchase ~~Alternative fuel~~ vehicles Electric	2015-2020	LI w/k & w/o k - no M-H - meet ideals	N, N, Y	cost, tech
Conducting a business evaluation of fleet usage, including operations and right sizing analysis	2015-2020			
Fueling vehicles in the evening	2015-2020			
Treat any biodiesel used for fleet vehicles and equipment with TxLED-equivalent additives	2015-2020			
Vehicle maintenance according to manufacturer specifications	2015-2020	LI w/ k - yes LI w/o k - yes } save $ M-HI - yes	N, N, Y	cost
Research the effectiveness of the Freight Efficiency Outreach Center managed by the North Central Texas Council of Governments to identify ways to limit emissions from the trucking industry	2015-2020			
Advocate for implementation of higher federal fuel efficiency standards	2020-2030			
Improve the energy efficiency of fleets (buses, taxis, delivery vehicles)	2020-2030			
Increase the supply and use of sustainable alternative fuels	2020-2030			
Foster more efficient freight movement	2020-2030			
~~Conduct a study of potential options to~~ implement truck re-routing to reduce driving and increase enforcement of anti-idling restrictions	2015-2020	LI w/ k: LI w/o k } yes, improve health M-HI	N	bureaucracy, political
Integrate fuel-efficient and zero emission specialized vehicles into the City's fleet where appropriate	2020-2030			
Purchase alternative fuel vehicles, review lifecycle emissions of E85 Ethanol – not natural gas or ethanol – go electric	2015-2020	~~LI w/k~~ ~~LI w/o k~~ ~~M-HI~~		
Develop incentives for public to purchase electric vehicles	2015-2020	LI w/k > no LI w/o k M-HI - yes - save $	N	political, credit, tech, cost, charging
Make all new bus purchases electric buses	2015-2020	yes (all) - improve health	N	cost, training workers
Research the possibility of implementing a hydrogen infrastructure (emerging in California)	2015-2020			
Research how to implement a grid-tied residential photovoltaic system that supports electric vehicles.	2015-2020			

Transportation

Persona:

Strategy: Technology Solutions

Action Categories

- Emerging
- Hardware/Software

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Continue to enhance travel via all modes through the Advanced Transportation Management System (ATMS)	2015-2020	Yes (all) - time, convenience, options	Some	cost, tech
Use dynamic message signs to notify travelers (e.g. extreme weather)	2015-2020	"	"	"
Complete enhanced bicycle detection pilot program	2015-2020	LI w/ K - maybe LI w/o K - yes (safety, time) M-HI - yes	N	cost
Complete utility planning for Google Fiber	2015-2020	M-HI - yes - convenience,	Y	time
LUT A27 - Promote increased bicycling and walking through traffic enforcement, program evaluation, and developing and integrating web-based tools, mobile applications and other educational materials.	2015-2020	Yes (all) - safety convenience	Some	time, cost
Wayfinding for pedestrians and bicyclists must incorporate national best practices and expand and refine the ideas contained within the Downtown Austin Wayfinding Master Plan.(proposed)	2020-2030	Yes (all) - safety, time	N	
Phase I - Deploying travel time data collection equipment along key arterial streets and regularly collect travel time data. Travel times will be used to: (1) influence travel behavior by disseminating traveler information on dynamic message signs and the web; (2) improve traffic flow.	2015-2020			
Promote the use of apps that track and show the health benefits of taking an alternative commute (app shows routes and amenities along the way), e.g. Metropia	2015-2020	M-HI - yes	Y	
Research and improve synchronization & traffic timing	2015-2020	Yes (all) - time	Y	
Research the feasibility of providing notification systems to drivers that provide information to the drivers pre-highway (home, work, arterial signs)	2015-2020			
Research the effectiveness of vehicle sensors with bike detection and/or motion heat detection to improve bike safety and awareness	2015-2020			
Utilize crowdsourcing for technology solutions	2015-2020			
Research possibility to expand RideScout app (shows all mode options for traveling from point A to B based on commute and cost)	2015-2020			
Improve business modeling that focuses on limiting commutes and limiting real estate footprint (work from home call center, customer service, administrative...)	2020-2030	M-HI yes - Convenience	Y	
Expand plug-in station network, including regional connections	2020-2030	M-HI	N	
Develop tools that allow residents to shop for and purchase products and services more efficiently (e.g. Gas Buddy)	2020-2030			

Transportation

Persona:

Strategy: **Technology Solutions**

Develop tools that allow employers to assess employee work/home locations and select the best places for employees to collaborate	2020-2030			
Implement suspended bikeways on the bottom of highways	2030-2050			
Evaluate if integrating solar energy generation in the transportation system (e.g. roadways, right of ways, on bus tops) can yield GHG benefits	2015-2020			
Evaluate the GHG benefits of wind generation that collects the headway wind off of moving vehicles along railways and roadways	2015-2020			
Research inclusion of an induction charging system inside City street for fast charging of electric vehicles	2015-2020			
Research the benefits, risks, and downfalls of the driverless vehicles	2015-2020			
Research the benefits, risks, and downfalls of self-parking vehicles	2015-2020			
Evaluate installing Smart Parking for compact and connected areas, including street parking 2015-2020 (System knows where spots are open and directs driver to open spot)	2015-2020			
Evaluate implementing a congestion notification system that compiles real-time data to provide users with information about the best time to travel	2015-2020			
Inform employers and resident on the tools that exist to select alternative times	2015-2020			
Develop a tool that can help realtors and employers select the best office locations for employers based on where employees live	2020-2030			
Develop trip management technologies (e.g. apps, websites, services)	2015-2020			
Research development of an interactive website where citizens can monitor their GHG emissions against others	2015-2020			
Public Transit that uses regenerative braking to provide power to transit vehicles and the energy grid, e.g. train system in Philadelphia	2020-2030			
Flying electric cars	2030-2050			

Transportation

Persona:

Strategy: **Land Use**

Action Categories

- Compact and Connected
- Mixed Use Development
- Centers

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
LUT A3 - Establish land use and street design regulations to create sustainable neighborhoods that are child-friendly, support walking and bicycling...	2020-2030			
LUT A13 - Create a system of high-capacity transit, including elements such as urban rail and bus rapid transit corresponding to land use mix and intensity.	2020-2030			
LUT A16 - Enhance crosstown transit options to better connect people to the places where they live, work, play, shop, and access services.	2020-2030			
LUT A17 - Create an efficient and connected transportation system that allows people with disabilities and special needs to easily access their daily needs from where they live and work.	2020-2030			
LUT A21 - Create a network of on- and off-street physically separated bicycle and walking routes or trails linking all parts of Austin and the region.	2015-2020			
CFS A2 - Expand equitable access for adults, children, and their pets to active and passive parks throughout the city by carefully targeting new parks where most needed and developing public access agreements with non-City-owned parks and open space.	2015-2020			
CFS A25 - Cluster and, where appropriate, co-locate public facilities and programs to reduce costs.	2015-2020			
Any and all policies to support density and mixed use development that support and enhance transit and active transportation options.	2015-2020			
More supportive infill policies to encourage density	2015-2020			
Commitment to planning of transportation systems based on objective analysis of environmental considerations (including CO2), demand models, congestion models, safety, and full life cycle cost / benefit analysis.	2020-2030			
Better knowledge and support of CAMPO centers, employment zones, and HTJ work	2020-2030			
Focus land use, location, and transportation solutions into recruiting of companies to Austin	2015-2020			
Plan location and design of new school campuses to encourage walking and biking to school	2015-2020			

Transportation

Persona:

Strategy: **Land Use**

Tax incentives for geographically distributed sites	2020-2030			
Policies that promote in-fill development	2015-2020			
Policies that encourage density	2015-2020			
Policies that promote mixed use development that co-locates residential land uses with destinations (e.g., employment, retail, day care) on transit corridors	2015-2020			
Policies that establish long-term affordability quota	2015-2020			
Policies that promote transit-oriented development	2015-2020			
Policies that limit parking in new development served by high quality transit (2 – need high quality transit in order for this to be effective)	2020-2030			
As per Imagine Austin, Development should occur in connected and pedestrian –friendly patterns supporting transit and urban lifestyles, and reducing sprawl, while protecting and enhancing neighborhoods. (pages 187-188 from Imagine Austin Comprehensive Plan cover investing in a compact and connected Austin, and lay out goals, and set metrics, with a phased time line)	2020-2030			
Tie new development with multimodal transportation options, not just concentrate on vehicular traffic	2020-2030			
Encourage businesses to locate in existing and complete communities	2020-2030			
On-site day care	2020-2030			
Affordable housing & employment centers along transit corridors	2015-2020			
Land use + transit along corridors	2015-2020			
Capture Transportation cost in mortgage estimate for new homes.	2020-2030			
Promote location efficient mortgages (better rates for centers locations)	2020-2030			
walkable nodes and mass transit connections. dense multi-use developments and public open space and water quality features. 1st floor retail, 2nd floor office/retail, 3rd floor office, 4+ residential.	2020-2030			
More development density in the central core makes public transit more effective. Continue to build up transit nodes around light rail stops, and add more of them.	2020-2030			
Allow, and give property tax incentives to, a variety of garage apartment and micro-housing typologies to increase density in existing single-family neighborhoods in Central Austin.	2020-2030			
Zone and promote retail business nodes in all of Austin's central neighborhoods to give people better access to goods and services without the need to get in the car.	2020-2030			

Transportation

Persona:

Strategy: **Land Use**

Promote transit-oriented development	2015-2020			
Make walking and biking easier by connecting urban centers and safe routes to schools	2015-2020			
Accommodate all population and business growth within Urban Growth Boundary	2015-2020			
Focus density around mass transit	2020-2030			
Make 20-minute complete neighborhoods a core component of land use planning	2020-2030			
Coordinate future mass transit investments with comprehensive plan land use decisions	2020-2030			
Facilitate aggregation of smaller land parcels that may provide opportunity for industrial development	2030-2050			

Transportation

Persona:

Strategy: Economic and Pricing Systems

Action Categories

- Parking Management
- Tolls

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Continue to make improvements to downtown parking demand	2020-2030			
LUT A1 - Give priority to City of Austin investments to support mixed use, transit, and the creation of compact walkable and bikeable places.	2015-2020			
LUT A31 -Improve streetscapes and infrastructure along activity corridors and at activity centers through the use of financing mechanisms such as Tax Increment Financing (TIF) districts and Public Improvement Districts (PID).	2015-2020			
HN A19 - Develop and implement strategies that address spillover parking from commercial districts into adjacent residential areas that include increased public transportation, better pedestrian and bicycling amenities, improved signs, and parking management.	2020-2030			
Employ vehicle parking maximums rather than parking minimums.	2020-2030			
Tier parking requirements based on context of the site, travel demand management activities and other factors. 1) In TOD's, Downtown, Core Transit Corridors and other transit-rich locations, remove parking minimums altogether/or put in place parking maximums. 2) Establish a process with defined approval criteria where a developer can adjust parking minimum based on results of a TIA or demonstrated implementation of travel demand management strategies. 3) Define types of parking and set different standards by type. For example, differentiate between long-term and short-term parking and allow higher levels of short term parking in office settings.(proposed)	2020-2030			
Allow for the reduction of vehicular parking spaces with addition of bicycle parking spaces above the minimum.(proposed)	2020-2030			
Evaluate investments in infrastructure and transportation demand management programs	2015-2020			
Incentivize carpooling by offering free or reduced parking	2015-2020			
Include parking cash-out programs within a transportation demand management tool	2015-2020			
Research and analyze congestion pricing as a mechanism to limit driving into downtown Austin	2015-2020			
Develop incentive programs for last mile transit connection	2015-2020			

Transportation

Persona:

Strategy: **Economic and Pricing Systems**

Incentivize large employers to offer on-site daycare services	2020-2030			
Research sourced of dedicated funding for technology solutions	2015-2020			
Research incentives for electric and alternative fuel drivers (lanes, parking, access, perks)	2015-2020			
Research economic incentives for personal devices that encourage virtual, dynamic, and flexible work options without travel (camera, projectors, computers, screens, other)	2015-2020			
Research economic incentives for electric vehicle infrastructure and alternative fuel suppliers (fuel purchase rebates, alt fueling locations)	2015-2020			
Research economic incentives for individuals and employers purchasing electric vehicles	2015-2020			
Research ways to incentivize older vehicle replacement	2015-2020			
Establish location efficient mortgages for buying within Centers or Corridors (e.g. better percentage rate for purchases within compact and connected areas.)	2020-2030			
Secure funding to launch outreach campaign that will inform residents about homebuyer incentives (compare/contrast with other areas that are not compact and connected)	2015-2020			
Provide free toll lanes for carpool (e.g. HOT lanes and/or HOV lanes)	2020-2030			
Find ways to fund trip management technologies (e.g. apps, websites, services)	2015-2020			
Incentivize the purchase of alternative fuel lawn equipment	2015-2020			
Provide property tax incentive to increase density in existing single-family neighborhoods (garage apartment and micro-housing typologies)	2020-2030			
Incentivize electric vehicles (HOV lanes for a nominal annual fee, free parking, discounted pricing during off peak hours, rebates for new purchases)	2020-2030			
Provide incentives to encourage residents to use alternative modes of transportation (public transit, bike/walk, carpool/vanpool, telework/flex schedule)	2020-2030			
Research implementation of time-of-use pricing for electric vehicle owners	2015-2020			
Incentives should be given for showers at places of employment, and shared shower facilities should be encouraged for people who don't have easy access to showers	2020-2030			
There should be tax credits for people who bike, walk, or take public transportation to work. Build HOV lanes instead of toll lanes	2020-2030			
Create and adopt a transportation impact fee to support local low-carbon transportation infrastructure and planning	2020-2030			

Transportation

Persona:

Strategy: **Economic and Pricing Systems**

Encourage and assist employers and transportation funding agencies to offer support for alternative transportation strategies that can help reduce the need to drive	2020-2030			
Levy a motor vehicle excise tax	2020-2030			
Research the benefits of pricing policies on climate protection, transportation, and community goals (e.g. reduced congestion, improved air quality, revenue generation) and their potential social equity impacts and solutions by examining the experience of other communities	2015-2020			
Incentives research that decreases VMT and increases electric vehicle use	2015-2020			
Implement a feebate system (provide incentives for manufacturers to build more efficient vehicles and reward consumers who purchase more efficient vehicles)	2020-2030			
Tradeable Credit Scheme (see http://link.springer.com/article/10.1007/s11067-013-9192-8)	2020-2030			
Set vehicle registration cost based on miles driven	2015-2030			
Price carbon at fuel sales	2020-2030			
Mandate or incentivize showers at workplace	2020-2030			
Direct toll revenue to increased transit	2020-2030			
Place demand-based pricing on parking that find fair market value (like Uber for parking)	2020-2030			

Transportation Persona:

Strategy: Transportation Infrastructure and Service

Action Categories

- Roadway improvements
- Signal improvements

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Complete funded Projects of Regional Significance (including MoPac Express Lanes)	2015-2020			
Fund and complete new Projects of Regional Significance (including Urban Rail)	2020-2030			
Achieve Mobility 35 - I-35 CAIP Goals	2020-2030			
Complete Projects funded with CAMPO Dec. 2011 funds (including bicycle facilities and sidewalks)	2015-2020			
Continue to retime all traffic signals along arterials every 3 years	2015-2020			
Continue to install Pedestrian Hybrid Beacons	2015-2020			
Complete Austin bicycle commuting projects in the City of Austin Capital Improvement Project List	2020-2030			
More Bus rapid transit and electrification of the bus network.	2020-2030			
Reducing red tape to obtain and spend federal funding to expedite the implementation of big projects that deliver results	2020-2030			
More separated bike lane facilities	2015-2020			
100% conversion of streets (that are safe) to include bike lane restriping	2020-2030			
Code creation and enforcement of bike parking and shower facilities at buildings	2015-2020			
Massive expansion of park and rides at rail, light rail, and bus transit centers	2030-2050			
Major extension of bus and public transport to suburbs	2020-2030			
More frequency and more reliability in the public transport options	2015-2020			
Free public transportation and extension of hours	2030-2050			
Free downtown circulator service (bring back the "dillo")	2020-2030			
Better and more sustainable funding mechanisms for transit	2020-2030			
Dedicated guideway prioritizing public transit	2020-2030			
Street design (current ROW) for transit	2020-2030			
Go above or below the street transit ways	2020-2030			
More investment in infrastructure/programs	2015-2020			
Complimentary links to public transit stops (sidewalks and bike lanes)	2015-2020			
Complete networks – sidewalks and cycletracks	2015-2020			

Transportation Persona:

Strategy: Transportation Infrastructure and Service

Improved protected infrastructure	2015-2020			
Urban tree planting/shade for increased walking/biking	2015-2020			
Bike infrastructure under/adjacent to highways	2015-2020			
Bike locks/cages/showers/etc. needed for commuters	2015-2020			
Connect first/last mile	2015-2020			
Incorporate Dynamic Message Systems	2015-2020			
Expand existing network of sidewalks, bikeways, and trails, and eliminate gaps to establish a well-connected network of sidewalks, trails and bikeways, distributed across the region	2020-2030			
Encourage 'eyes on the street' / pedestrian oriented design for the built environment as in front porches, alleyways for vehicular traffic to improve perceptions of safety and well-being	2020-2030			
Elevated and dedicated rail system	2030-2050			
determine and develop main bike superhighway corridors that stretch from the burbs to the capitol and paint them blue, remove barriers and anyone can understand if they're headed to the center of town or not. paint neighborhood and connector routes green so you know you're meandering a bit and can expect more stops.	2020-2030			
Speed limit within 2 miles of a bike share station shouldn't be more than 20mph.	2015-2020			
Provide separated bike lanes (cycletracks) and multi-use paths (urban trails)	2015-2020			
Implement more frequent bus service and separate bus lanes	2030-2050			
Build HOV lanes instead of toll lanes.	2030-2050			
Build physically separated bike lanes and improve intersections for bike safety	2015-2020			
Expand bike racks, bike parking, and bike share	2015-2020			
Install solar roadways	2030-2050			
Install electric priority lanes with induction charging while car is in motion	2030-2050			
Install dynamic lines on road deck. Markings can be flexibly adjusted to show a continuous line or dotted line...adjustable depending on the situation which contributes to capacity management	2030-2050			
Improve rail and bus connections, e.g. London Heathrow airport rail-air bus links	2020-2030			
Install Roundabouts	2020-2030			
Ensure there is at least one bus route within ¼ mile of residential property	2020-2030			

Transportation Persona:

Strategy: Transportation Infrastructure and Service

Stop building freeways and highways, and begin decommissioning existing highways	2020-2030			
Convert more highways into tolled highways	2020-2030			
Use smoother pavements: more maintenance, less fuel usage	2020-2030			
Evaluate installing solar on land, e.g. park-and-rides. Sell energy to the grid and use money to fund other solar projects	2020-2030			
Install an advanced rapid transit system (elevated guideway on segregated right-of-way with no road vehicle or pedestrian crossings), e.g. Sky Train Vancouver British Columbia	2030-2050			

Transportation

Persona:

Strategy: Transportation Demand Management

Action Categories

- Trip Avoidance
- Walk
- Public Transit
- Biking
- Carpool/ Vanpool

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Continue to improve Transportation Demand Management	2015-2020			
Meet bicycle program goal - 5% of Austinites regularly bicycle commuting by 2020	2020-2030			
LUT A14 - Increase public transit ridership.	2020-2030			
Increase citywide workforce commuter bicycle mode to 2% by 2015 and to 5% by 2020.	2020-2030			
Increase central city workforce commuter bicycle mode to 8% by 2015 and to 10% by 2020.	2020-2030			
Increase bicycle mode share of children commuting to school to 25% by 2020.	2020-2030			
Increase number of Bike to Work Day participants to 1,000 participants in 2009 and by 10% for every subsequent year.	2015-2020			
Commute reduction programs (policy driven?)	2015-2020			
Behavior change (start with youth)	2015-2020			
Improve transit service, efficiency	2020-2030			
Limited driving privileges (odd/even days, age/type of vehicle)	2030-2050			
Partner with regional partners to extend transit for non-Austin based commuters	2030-2050			
Mobile or neighborhood-scale bike repair and ambassadors	2015-2020			
On-site day care	2020-2030			
Public education regarding benefits of biking/ walking (behavior change campaign)	2015-2020			
Incentives (program from businesses, bike-friendly districts)	2015-2020			
For folding bikes/skateboards for last mile connection	2015-2020			
Parking cash out	2015-2020			
Paris subsidizing bike commuters	2015-2020			
Preferred/reduced-fee parking for carpoolers	2015-2020			
Adopt policies to legalize carpool services such as Uber and Lyft	2015-2020			
Require major employers to implement trip reduction plans	2015-2020			
Require employers to survey and inventory how employees commutes	2015-2020			

Transportation

Persona:

Strategy: Transportation Demand Management

Provide incentives for business to reduce employee SOV trips	2015-2020			
Provide increased recognition for companies with trip reduction programs	2015-2020			
Promote competition among vanpool vendors	2015-2020			
Educate business on the cost benefits of reducing employee SOV trips	2015-2020			
Conduct assessment of available Hoteling options for companies	2020-2030			
Major marketing campaign to promote alternative commutes	2015-2020			
Conduct outreach to educational intuitions to promote trip reduction	2015-2020			
Outreach to neighborhood associations to make them aware of commute options	2015-2020			
Identify solutions by type of trip (ie. Work, school, errand)	2015-2020			
Identify opportunities for governmental agencies to reduce trips	2015-2020			
Add alternative small scale transit modes – collective zoned vanpool service, flex route system	2020-2030			
The bike network needs to be extremely intuitive and safe.	2020-2030			
I think the issue of incentivizing non-auto transportation is essential to achieving this goal. We need to provide incentives for people to: use rail, use the bus, carpool, bike, walk or telecommute. To change mindsets about transportation there needs to be economic incentives	2020-2030			
Obviously we need to improve cycling infrastructure and make it as safe as possible but we also need to cater to cyclists in other way with showers and economic incentives.	2020-2030			
We need more rail but it is expensive	2020-2030			
Start by making it attractive for people to stay out of their cars.	2020-2030			
The other initiative (that is no less important) is encouraging businesses and academic institutions to promote telecommuting	2020-2030			
Build a bike system that will be safe for people ages 8 to 80. This includes separated bike lanes (cycletracks) and multi-use paths (urban trails).	2020-2030			
Increase frequency of bus service and separate bus lanes are also needed	2015-2020			
Institute multi-agency effort to support vehicle sharing and ride sharing	2015-2020			
Invest more in (high-capacity) transit	2015-2020			
Promote care share, carpool, and ride share	2015-2020			
Support intercity rail	2015-2020			

Transportation Persona:

Strategy: Transportation Demand Management

Improve freight movement; develop freight master plan	2020-2030			
Support broadband connectivity to enable widespread e-commerce	2015-2020			
Work with regional and state partners on reducing VMT through strategic investments; business	2020-2030			
Business employee commuter benefit programs	2015-2020			
Identify and fund system and demand management projects with greatest emission reduction potential	2015-2020			
Install shade canopies with photovoltaic roofs over bike lanes	2015-2020			
Stop building and investing in freeways and start decommissioning existing highways	2020-2030			
Build dedicated and isolated bike lanes to help people commute safely (e.g. walnut creek trail from Manor)	2020-2030			
Build pedestrian only roads with amenities (e.g. Broadway in New York and Curitiba, Brazil)	2020-2030			
Implement commuter award program for businesses	2015-2020			
Establish a designated consultant/advisor that can provide help understanding telework and other modes	2015-2020			

Transportation

Persona:

Strategy: **Policy and Planning**

Action Categories

- Government Sponsored Initiatives
- Public/Private Partnerships

Actions	Timeframe	How it would benefit you if implemented	Currently doing this, affects you (Y or N)	Barriers (Cost, convenience, time, other)
Implement Complete Streets Policy	2015-2020			
Continue to add more volume-count stations to make informed traffic-system improvements	2015-2020			
Update the City's Transportation Criteria Manual	2015-2020			
Complete update to the Austin Metropolitan Area Transportation Plan (AMATP)	2015-2020			
Continue to work with major events to establish innovative transportation plans	2015-2020			
LUT A5 - Create a regulatory environment to promote the redevelopment of brownfields and grayfields into compact, walkable places by:...Revising parking requirements that result in more permeable areas and promote walking, biking, and transit;	2020-2030			
LUT A11 - Develop land use and transportation policies and regulations that promote the development of projects that promote more active and healthy lifestyles, such as community gardens, tree-shaded sidewalks and trails, bicycle parking, showers within office buildings, and having daily needs within proximity to home and work.	2020-2030			
Work with employers to enhance existing trip reduction programs	2015-2020			
Work with employers to establish business locations within or near Centers and Corridors	2020-2030			
Research and analyze limiting driving privileges as a tool to reduce the number of vehicles traveling at peak times	2015-2020			
Work with regional partners to extend public transit options to commuters that reside outside of the City of Austin	2020-2030			
Research the need for establishing neighborhood bicycle ambassadors and mobile neighborhood bicycle repair options	2015-2020			
Ensure that new school campuses are located and designed to encourage walking and biking to school	2020-2030			
Adopt policies that allow carpool services, such as, Uber and Lyft to operate within Austin	2015-2020			
Work with employers to encourage "shared" worksites close to where employees live	2020-2030			
Work with employers to convert fleets to cleaner fuels	2020-2030			
Develop policies that promote in-fill development	2020-2030			
Develop policies that encourage density	2020-2030			

Transportation

Persona:

Strategy: **Policy and Planning**

Develop policies that promote mixed use development that co-locates residential land uses with destinations on transit corridors	2020-2030			
Develop policies that establish long-term affordability quota	2020-2030			
Develop policies that promote transit-oriented development	2020-2030			
Eliminate Free Parking for City controlled parking spaces within or near Centers and Corridors	2015-2020			
Work with Private Property Owners to eliminate free parking	2015-2020			
Work with toll road management organizations to develop incentives that encourage high occupancy vehicles to use toll roads and/or lanes more frequently	2020-2030			
Work with toll road management organizations to develop incentives that encourage freight haulers to use toll roads	2020-2030			
Work with real estate industry, financial institutions, home mortgage companies, and others to incentivize affordable housing and location efficiency	2020-2030			
Research Transportation Network Companies (TNC) potential benefits to GHG reductions	2015-2020			
Build hotel workstation strategies into land use planning	2020-2030			
Establish intergovernmental agreements between municipalities captures commitments to increase density around Centers	2020-2030			
Work with businesses and academic institutions to promote telecommuting	2020-2030			
Review speed limits within the urban core and adjust to speeds that protects the safety of all right of way users	2015-2020			
Evaluate policy instruments that could aid in adoption of electric vehicles in the market place (e.g. off peak charging, two way charging)	2015-2020			
Evaluate City fleet vehicle purchase process to determine how more electric and hybrid vehicles	2015-2020			
Work with employers to improve adoption of electric vehicles and promote the installation of chargers at business locations	2020-2030			
Prepare a comprehensive, integrated transportation plan in close collaboration with regional agencies, local service providers and the community	2020-2030			
Prioritize GHG reduction opportunities in the City's CodeNEXT process	2015-2020			
Collaborate with regional partners to expand and enhance public transit service, interconnections, vehicle amenities, and associated facilities	2020-2030			

Transportation

Persona:

Strategy: **Policy and Planning**

Collaborate with community partners in developing and providing sustained community outreach and marketing about all available alternative transportation options	2015-2020			
Partner with the City's largest employers, event venues, and other destinations to ensure that employees and visitors to the City have full information about the transportation choices	2015-2020			
Partner with and promote community based organizations that provide knowledge and skills, such as, bicycle safety training, transit system use, etc. to help residents shift trips to non-auto modes	2015-2020			
Develop regulations that would permit parking requirements to be met through alternative approaches demonstrated to reduce parking demand and GHG emissions (e.g. on-site car-sharing, bicycle parking, transit passes)	2020-2030			
Develop a strategy to facilitate unbundling of the cost of renting parking for a renting building space, where appropriate, to more explicitly charge for parking	2020-2030			
Work with large fleet operators, such as, taxi companies, along with the City's own fleet, to establish minimum GHG performance criteria for all new fleet vehicles and fleet-wide GHG performance goals	2020-2030			
Discontinue the practice of providing parking to City employees based in transit-rich locations	2015-2020			
Partner with regional jurisdictions to develop modeling tools for evaluating emissions impacts of land use and transportation decisions and monitoring carbon emissions	2015-2020			
Implement a household survey	2015-2020			
Work with freight companies and regional partners to develop a plan for reducing greenhouse gas emission related to freight movement within and through the region	2015-2020			
Work with TXDOT to identify and fund the system and demand management projects that have the greatest potential to reduce emissions related to congestion, idling, and system performance	2015-2020			
Work with businesses to promote flexible and compressed work schedules	2015-2020			
Work with large fleet operators, such as, taxi companies, along with the City's own fleet, to replace older vehicles with electric vehicles	2015-2020			
Provide permitting advantages to home builders that offer homes that use zero carbon based energy, including charging station for electric vehicles	2020-2030			
Work with regional partners to develop behavior change campaigns focusing on a 5-mile car-free zone	2015-2020			

Transportation

Persona:

Strategy: **Policy and Planning**

Work with regional partners to develop community based engagement campaigns, e.g. SmartPower Solar Ambassadors	2015-2020			
Mandate or incentivize showers at workplace	2020-2030			