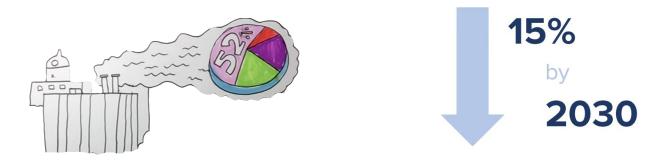


Building(s) for the Future Summit Breakout Group: Rental Housing January 15, 2020, 12:30 - 3:00pm

Welcome to Building(s) for the Future and the "Rental Housing" breakout group. Missoula has worked to advance climate mitigation and adaptation efforts in recent years (adoption of the 100% Clean Electricity Resolution, Climate Ready Missoula plan, Zero by Fifty plan, etc). Buildings play a role in each of these efforts as **they comprise 52% of our community's carbon emissions, according to 2014 data.** They are increasingly important as pressures mount for development to keep pace with community growth, and in order to meet our carbon neutrality and 100% clean electricity goals, we estimate that Missoula must **reduce total building emissions 15% by 2030.**



To "build for the future," we need to consider ways to decarbonize the design, construction, operation, and deconstruction of our building stock. Over the past several months, we've done extensive research and received technical support from the American Council for an Energy-Efficient Economy (ACEEE) and National League of Cities on building policy and program precedents and best practices to inform our conversation. Panelists from across the country will share inspiring and innovative approaches, and our breakout group will build on their presentations to chart the path forward for how Missoula can build a more equitable, low-carbon future by focusing on ways to reduce the energy use intensity of rental housing.

Renters comprise a major demographic in our community (51% of households in the city and 42% of households in the county), and energy efficient and affordable rental housing is a crucial area of need in Missoula.² With 48.2% of renters cost burdened in the city,³ there is little room for spending an outsized amount of income on utilities. Nationwide, renters are often in the least efficient housing and spend a disproportionate amount of their income on utilities.⁴ Furthermore, renters have less control than homeowners over their homes' energy efficiency or

¹ Climate Smart Missoula and City of Missoula. "<u>Missoula Community Greenhouse Gas Emissions Inventory</u>," March 2017.

² "Missoula Housing Report" (Missoula, MT: Missoula Organization of Realtors, 2020).

³ Ibid.

⁴ "America's Rental Housing 2020." Joint Center for Housing Studies of Harvard University, 2020.

ability to generate renewable energy. More robust programs with stakeholder engagement of renters, property managers and landlords are urgently needed.

Primary Strategies to Consider

With technical assistance from the American Council for an Energy-Efficient Economy, the National League of Cities, and community members, we have identified several strategies that Missoula should consider implementing. This list is not meant to be exhaustive (we hope you will provide additional ideas!), and they are brief descriptions rather than comprehensive explanations of how such a program or policy would be designed or implemented. Where possible, we have included an estimate of the \$/MT of CO₂ reduced to help evaluate their impact and cost. Our hope is that the following will jumpstart the group's conversation and help all participants begin from a place of shared understanding. As you read, consider the pros and cons of each, as well as what you believe Missoula should prioritize pursuing in the next year, 5 years, and 10 years. Strategies include:

- Rental certification program with energy efficiency requirements
- Home energy disclosure at time of rent (energy use label)
- Energy savings competition
- Renewable energy for renters
- Retrofit assistance program
- Energy efficiency "bulk buy"

For an overview of all the strategies being discussed today, including the ones in this background brief, please reference Appendix A.

Rental certification program with energy efficiency requirements

A rental certification program would attach energy efficiency requirements to the process of acquiring or renewing a rental property owner's certificate of occupancy or business license (such a registry program does not currently exist in Missoula.) The certification program requires local government to establish a rental property registry, and all rental properties must meet a minimum energy efficiency rate or perform a prescriptive list of actions before receiving a rental license. With financial incentives, technical assistance, and flexible compliance pathways, a rental certification program can mitigate increases in rent that may come with property improvements. The city of Bozeman identified this as a top strategy in their recent climate action plan, and Boulder, CO and Ann Arbor, MI currently have successful programs in place.

According to ACEEE, 10 - 30% energy savings are possible across rental properties.⁵ It may not necessarily save renters money if the cost of the improvement is passed on to them as a rent increase, though it would result in reduced monthly utility bills as well as improved comfort inside of the home.

⁵ John O'Neill and Stefen Samarripas, "Missoula Residential Climate Action Strategies," October 2, 2020.

~\$30/ MT of CO₂ reduced

Home energy disclosure at time of rent (energy use label)

Energy bills are a significant household expense, and yet prospective renters are typically unable to factor this information into their decision making. Unless a prospective renter specifically requests utility data, it is rarely provided. Requiring all units to include an energy use label at time of rent would allow tenants to make better informed decisions. A home energy label provides information about a property's energy consumption and costs, plus recommendations for cost-effective energy saving improvements. While there are several rating systems available, the Department of Energy's Home Energy Score has become popular because of its simplified approach that makes it easy for renters to make comparisons across properties. The same department that would manage the rental property registry (see above) could oversee this disclosure. While initial results from home energy disclosure policies in Portland, OR, Berkeley, CA, and Santa FE, NM are promising, more data is needed to assess the energy reductions that come with home energy disclosure and labeling.

Energy savings competition

An energy savings competition could encourage local businesses, homeowners, and renters to reduce their energy consumption. Program design of such competitions varies greatly, and Missoula would need to engage all relevant stakeholders when identifying the details of a Missoula based competition. Generally speaking, competitions measure the change in participants' energy use from before the competition to during the competition and provide prizes to winners, utilizing online software to engage participants and track results via a public leaderboard or dashboard. Missoula would not be the first Montana community to design an energy savings competition: Bozeman, MT hosted the "Energy Smackdown" competition in 2015.

In a review of energy savings competitions, they were found to achieve, on average, a 5% reduction in electricity usage.¹¹ If paired with other incentives that could make whole home retrofits possible, energy savings could be much more substantial. Rutland NeighborWorks in Vermont spearheaded a program that allowed 5% of residences to undergo a comprehensive

⁶ City of Bozeman, MT, "Bozeman Climate Plan" (City of Bozeman, MT, 2020).

⁷ American Council for an Energy-Efficient Economy. "<u>Home Energy Efficiency Policies: Ratings</u>, <u>Assessments, Labels, and Disclosure.</u>" Washington D.C.: American Council for an Energy-Efficient Economy, October 2018.

⁸ Ibid.

⁹ Ariel Drehobl, Maxine Chikumbo, and Kate Tanabe. "<u>Reducing Energy Waste through Municipally Led Behavior Change Programs.</u>" Washington, D. C.: American Council for an Energy-Efficient Economy, November 2018.

¹⁰ Montana Right Now. "City Launches Bozeman Energy Smackdown," May 29, 2015.

¹¹ Edward Vine and Christopher Jones, "<u>A Review of Energy Reduction Competitions: What Have We Learned?</u>" (Berkeley, CA: California Institute for Energy and Environment, May 2015), p. v.

retrofit, which led to 30% savings in each household.¹² For an energy savings competition to be most effective, it needs to be paired with other resources, such as robust customer service: a recent study by Vine and Jones found that competition alone was not sufficient to achieve energy usage reductions.¹³

Renewable energy for renters

Increasing renters' access to clean energy can be accomplished via Missoula's 100% clean electricity efforts, specifically:

- Solar-ease expansion. Solar-ease is the community campaign to encourage residents
 and businesses to go solar. It has so far not focused on landlords and tenants, though
 this could be an opportunity for expansion of existing outreach efforts. Because the
 landlord would incur the initial capital costs and the benefits would be reaped by the
 tenants through lower utility bills, a green lease (a lease that helps align tenant and
 landlord interests for investments in energy efficiency) would likely need to be developed
 in order to better share costs between the landlord and tenant.
- Green Tariff. A green tariff is a mechanism that has been used in a number of other states with regulated utility markets (like Montana's) to meet customers' demands for new renewable energy on a large scale. It's important to note that in utility jargon, the word "tariff" does not mean "tax," it simply refers to a rate that customers pay for electricity. NorthWestern Energy is currently working with stakeholders, including Missoula City and County, to develop a green tariff that will (if successful) result in the development of new large-scale renewable energy systems in the state of Montana that NorthWestern customers will have the option of buying into through their utility bills.
- **Utility owned community solar.** The City, County, and NorthWestern Energy have been discussing the possibility of developing a solar project in the Missoula area that would be available for any NorthWestern customer in Missoula County to buy into. The rate structure would be similar to the green tariff (above).

Retrofit assistance program

A retrofit assistance program would be a new local government program for homeowners and landlords that provides grants or low-interest rate loans to perform energy efficiency upgrades. Size and terms of the grants or loans would be determined at a later stage, though existing programs in Boulder, CO Minneapolis, MN, Milwaukee, WI, Dallas,TX and Chicago, IL focus on both the health and safety upgrades that are needed before energy efficiency upgrades are possible, as well as the energy efficiency upgrades themselves. They also often include no-sell or affordability covenants for those accepting the funds in order to preserve existing affordable housing. Programs should be designed in tandem with, and promoted to, low-income residents who are unable to access traditional financing for efficiency projects. Funding for such a program could come from a variety of sources, such as Community Development Block Grants

¹² Ibid.

¹³ Ibid.

(CDBG), HOME Investment Partnerships Program (HOME), Missoula's Affordable Housing Trust Fund or other local funds. ACEEE estimates 20 - 25% residential energy savings can result from this type of program, and it is especially impactful for improving the health, comfort, and safety of marginalized residents¹⁴

Energy efficiency "bulk buy"

A bulk buy program is when a local government makes a bulk purchase of high efficiency products (heat pumps, LED light bulbs, etc.) and then provides them to citizens at a below market cost to fill gaps in existing rebate and incentive programs. This could reduce the upfront cost of high efficiency heating and lighting systems for landlords interested in owning more efficient properties, or tenants interested in making simple energy efficient improvements. Such a purchase could be made in collaboration with other Montana cities to drive down cost and amplify benefits. Ann Arbor, MI recently identified it as a top strategy to meeting their city's carbon neutrality goal, with an estimated cost of \$3.92/MT of CO₂ reduced and strong health, economic, and equity co-benefits. To

~\$4/ MT of CO₂ reduced¹⁸

Foundational Strategies to Consider

Each of the primary strategies are more feasible when paired with one or more of the foundational strategies below. As you evaluate the primary strategies above, consider these foundational strategies and what they would need to look like or include in order for Missoula to be successful. Foundational strategies include:

- Expand available financing options (variety of forms)
- 1-stop energy shop for residential and commercial properties
- Workforce development
- Expand access to low carbon and high efficiency materials

Expand available financing options (can take a variety of forms)

- **Private financial institutions** can offer (or expand their offerings of) financial products for energy efficiency, renewable energy, and electrification.
- **Utilities** can offer on-bill financing or on-bill repayment. In on-bill financing, the utility incurs the cost of the upgrade and it is repaid in monthly installments on the bill. On-bill

¹⁴ John O'Neill and Stefen Samarripas, "Missoula Residential Climate Action Strategies," October 2, 2020.

¹⁵ "A2Zero: Ann Arbor's Living Carbon Neutrality Plan," April 2020.

¹⁶ Bozeman has identified "Increase energy efficiency in existing buildings" as a top strategy in their recent climate plan. For more information, see: City of Bozeman, MT, "Bozeman Climate Plan" (City of Bozeman, MT, 2020).

¹⁷ "A2Zero: Ann Arbor's Living Carbon Neutrality Plan," April 2020.

¹⁸ Ibid.

- repayment is the same except that a third-party provides the up-front capital for the improvement.
- The City of Missoula, as a charter city, can establish PACE financing where a clean energy improvement is paid for via property taxes. The repayment is attached to the property rather than the individual. **Missoula County** may also be able to establish a similar program tied to property taxes.

1-stop energy shop for residential and commercial properties

Technical assistance will be central to high compliance or participation rates for any of the above policies and programs. A 1-stop energy shop would centralize incentives and technical assistance to make it as easy as possible to implement energy efficiency measures. For example, a property owner could contact a 1-stop shop to schedule an energy audit, after which they would be connected to contractors to implement recommended upgrades and receive assistance identifying and applying for applicable incentives and financing options. Additionally, a 1-stop shop could raise community awareness about key issues such as electrification. For example, gas stoves are immensely popular. Recent research, however, has shown there are serious indoor air quality and health impacts associated with cooking with a gas stove. Additionally, climate science underscores the importance of moving away from gas and propane infrastructure and towards all-electric systems for cooking, heating, and cooling. 1-stop shops are typically pursued in partnership with the local utility, though Missoula may be able to create a 1-stop shop independently with appropriate funding.

Workforce development

The policies and programs, if pursued, will likely increase demand for a skilled workforce of energy service companies and contractors who can perform high-quality building audits and retrofits. Missoula will need to pursue partnerships between local energy efficiency businesses, Missoula College, and other relevant stakeholders to develop a robust clean energy workforce, as well as provide training opportunities for those already in the industry. Workforce development programs can and should diversify the clean energy workforce and support the hiring and training of those typically not employed in these jobs.

Expand access to low carbon and high efficiency materials

Building materials are constantly evolving. As low-carbon, high efficiency materials (cross laminated timber, high efficiency windows, etc.) become more cost effective, it will be easier to incorporate them into projects. Additionally, this is a potential opportunity for supporting local entrepreneurs that focus on the manufacturing and distribution of these materials.

This work was funded by the National League of Cities' Leadership in Community Resilience grant. For more information, visit www.missoulaclimate.org/buildings.

¹⁹ Sabrina Imbler, "Kill Your Gas Stove," The Atlantic, October 15, 2020.

Appendix A: Overview of Strategies

KEY											
	Type of Tool	Building Stage Feasibility Analysis					Group Codes				
\$	$\hat{\mathbf{m}}$			Ñ_					OWN - Owner Occupied Housing RENT - Rental Housing SUB - Low Carbon Subdivisions		
Incentive/Financial			Construction	Operation	Next Life (Decon/Rehab)	Move ahead	Some reservations	LARGE - Large Buildings INNOV - Promotion + Innovation INCENT - Developer Incentives			
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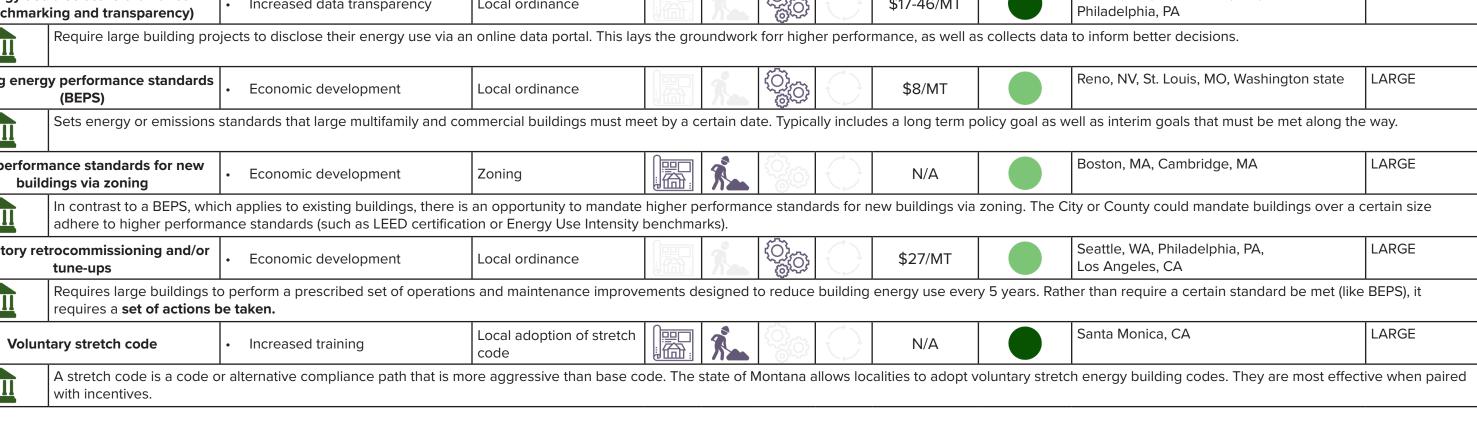
	Tool Name	Other Possible Outcomes (in addition to low-carbon buildings)	Implementation Lever	Could advance objectives of	\$/MT of CO ₂ e Estimate	Legality	Selected Precedents	Groups Discussing
Ex	pand financing	Economic development	Public private partnership		N/A		Clearwater Credit Union, People's Gas in IL, Alabama Power	ALL
\$		n take a variety of forms. Private financia l syment. The City of Missoula or Missoula	•			-	ble energy, and electrification. Utilities can offer than the individual.	er on-bill
C	One-Stop shop	Greater coordinationIncreased community awareness	Public private partnership		N/A		Energy Trust of Oregon and Energy Works of Fort Collins, CO	ALL
	The 1-stop shop approa	ch makes energy efficiency more access	ble for a larger portion of th	ne population (commercial and resid	ential) by simplify	ing a complic	ated process. It typically requires a strong part	nership with t
Workf	force development	Economic development	Public private partnership		N/A		Philadelphia, PA, Minneapolis, MN, and Raleigh, NC	ALL
		orkforce of energy service companies and or ocal businesses, Missoula College, and or	-		•	•	any of the strategies in this table. Missoula will an energy workforce.	need to purs
Expand	l access to materials	Economic development	Public private partnership		N/A			ALL
	Building materials are of distribution of these ma		iency materials are becom	ing more cost effective, and they pro	esent an opportun	ity to suppor	t local entrepreneurs that focus on the manufac	cturing and
Home er	nergy label ordinance	Increased consumer awarenessEconomic development	Local ordinance		N/A		Minneapolis, MN	OWN, RENT
<u></u>	All home sales and rent	al leases must disclose the unit's energy	report card at time of sale of	or lease.				
Residentia	al energy conservation	Increased consumer awareness	Local ordinance		N/A		Burlington, VT, San Francisco, CA, and	1
	dinance (RECO)	Economic development	Local orallance		IN/A		Berkeley, CA	OWN
	<u> </u>	Economic development tive sellers or buyers to perform a set of				% energy sav	<u> </u>	OWN
ord	<u> </u>					% energy sav	<u> </u>	OWN, RENT
ord	RECOs require prospec	ctive sellers or buyers to perform a set of	ow-cost energy efficiency i Public private partnership	mprvements. These ordinances cou	Id result in 10 - 20		vings for the average home. Bozeman, MT, Fargo, ND	OWN, REN
Energy	RECOs require prospec	Increased community awareness	ow-cost energy efficiency i Public private partnership	mprvements. These ordinances cou	Id result in 10 - 20		vings for the average home. Bozeman, MT, Fargo, ND	OWN, RENT
Energy	RECOs require prospectors savings competition An energy savings competition assistance program A retrofit assistance pro	Increased community awareness petition encourages owners and renters Preserve affordable housing Economic development	Public private partnership to reduce their energy constructions. New local government program for homeowners a	mprvements. These ordinances coulombies and landlords that provides grants or	N/A N/A N/A N/A N/A N/A Iow-interest rate	s at the groun	Bozeman, MT, Fargo, ND Ind level for greater energy awareness. Boulder, CO, Minneapolis, MN, Milwaukee,	OWN, RENTINNOV, LAR



A bulk buy program is when a local government makes a bulk purchase of high efficiency products (heat pumps, LED light bulbs, etc.) and provides them to citizens at a below market cost to fill gaps in existing rebate and incentive programs.

						K	EY						
	Type of Tool				Building Stage						lity Analysis	Gro	up Codes
\$	血						\bigcirc				OWN - Owner Occupied Housing RENT - Rental Housing SUB - Low Carbon Subdivisions		
Incentive/Financial	Regulatory	Programmatic	Blueprint Const		Constru	uction Operation I		Next Life (Decon/Rehab)		Move ahead Some res		ons LARGE - Large Building INNOV - Promotion + Ir INCENT - Developer In	
Tool Nar	ne	Other Possible Outcomes (in addition to low-carbon buildi		Implementat	tion Lever	Could ad	vance objectives of	\$/MT of CO ₂ e Estimate	Legality	Selected	Precedents		Groups Discussing
Eco-District • National recognition			Public private partnership				N/A		Minneapolis, MN, Denver, CO, Bo		Boston, MA	INNOV	

Tool Name	Other Possible Outcomes (in addition to low-carbon buildings)	Implementation Lever	Could advance objectives of	\$/MT of CO ₂ e Estimate	Legality	Selected Precedents	Groups Discussing
Eco-District	National recognition	Public private partnership		N/A		Minneapolis, MN, Denver, CO, Boston, MA	INNOV
District-level project th recognition.	at brings together area stakeholders to de	esign and implement ambiti	ous projects with outcomes in equit	y, resilience, and c	limate mitiga	tion. Brings a unique branding opportunity wit	h national
Promotion of flagship projects	Increased community awarenessMarketing opportunity for leaders	· ·		N/A		Sarasota, FL	INNOV
	s by being able to exist city or county-wide poling, or reducing embodied carbon. Cou	_				what's expected," such as with a deconstruction person).	on plan, all-
Rental certification program with energy efficiency requirements	Increased comfort and health	Local ordinance		\$30/MT		Ann Arbor, MI	RENT
	erty registry and attach energy efficiency thways to help property owners. Bozemar				ertificate of o	ccupancy. Provide financial incentives, technic	al assistance,
Renewable energy for renters	Economic developmentIncrease clean electricity supply	Public private partnership		N/A		Southern California Edison	RENT
	ss to clean energy via Missoula's 100% cle develop a green lease that helps align te			tarriff, or utility ow	ned commur	nity solar. Solar-ease expansion can expand fo	cus to landlor
Energy use disclosure ordinance (benchmarking and transparency)	Increased data transparency	Local ordinance		\$17-46/MT		Seattle, WA, Fort Collins, CO, and Philadelphia, PA	LARGE
Require large building	projects to disclose their energy use via a	n online data portal. This la	ys the groundwork forr higher perfo	rmance, as well as	s collects data	a to inform better decisions.	•
uilding energy performance standar (BEPS)	• Economic development	Local ordinance		\$8/MT		Reno, NV, St. Louis, MO, Washington state	LARGE
Sets energy or emission	ons standards that large multifamily and co	ommercial buildings must m	eet by a certain date. Typically inclu	des a long term po	olicy goal as v	well as interim goals that must be met along th	e way.
High performance standards for new buildings via zoning	• Economic development	Zoning		N/A		Boston, MA, Cambridge, MA	LARGE
	which applies to existing buildings, there is brmance standards (such as LEED certificat		e higher performance standards for	new buildings via	zoning. The (City or County could mandate buildings over a	certain size
landatory retrocommissioning and/ tune-ups	• Economic development	Local ordinance		\$27/MT		Seattle, WA, Philadelphia, PA, Los Angeles, CA	LARGE
Requires large building requires a set of actio		ns and maintenance improv		g energy use ever	y 5 years. Rat	ther than require a certain standard be met (lik	e BEPS), it
		Local adoption of stretch				Santa Monica, CA	LARGE



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	Type of Tool			g Stage	Feasibil	ity Analysis	Group Codes		
\$	$\hat{\mathbf{m}}$			8_					OWN - Owner Occupied Housing RENT - Rental Housing SUB - Low Carbon Subdivisions
Incentive/Financial	Regulatory	Programmatic	Blueprint	Construction	Operation	Next Life (Decon/Rehab)	Move ahead		LARGE - Large Buildings INNOV - Promotion + Innovation INCENT - Developer Incentives

Tool Name	Other Possible Outcomes (in addition to low-carbon buildings)	Implementation Lever	Could advance objectives of	\$/MT of CO ₂ e Estimate	Legality	Selected Precedents	Groups Discussing
Density bonus	Increased density	Zoning		N/A		Austin, TX, Seattle, WA	INCENT
\$ Provides additional dens	ity for projects that go beyond base bui	lding code.					
Reduced parking requirements	Greater walkability	Zoning		N/A		Flagstaff, AZ, Denver, CO, State of CA	INCENT
\$ Allows projects that go b	eyond base building code to provide fe	wer minimum parking space	es.	•			•
Impact and/or permit fees reduced	Reduced revenue for local government	Zoning		N/A		St. Petersburg, FL, San Diego, CA	INCENT
Reduces impact and peri	mit fees for projects that go beyond bas	e building code.					•
Permit process expedited		Zoning		N/A		Albuquerque, NM, Salt Lake City, UT, Chula Vista, CA, Miami, FL	INCENT
\$ Provides a faster permitti	ing process for projects that go beyond	base building code.					
Property tax abatement	Reduced revenue for local government	Zoning		N/A		Virginia Beach, VA, Cincinnati, OH, Cleveland, OH, Baltimore, MD	INCENT
\$ Provides partial reduction	n in property taxes for projects that go b	peyond base building code.					•
TIF made available	Increased conversations about TIF	Missoula Redevelopment Agency		N/A		Chicago, IL	INCENT
\$ Makes TIF funding availa	ble for projects that go beyond base bu	ilding code.					