



City of Dallas

Priority Improvement Zones and Aligned Street Lighting Plan

**City Council Briefing
November 4, 2020**

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Presentation Overview



- Background
- Purpose
- Lighting as Public Safety
- Priority Improvement Zones

Aligned Streetlighting Efforts

- TRN: Internal & Partnership Projects
- OIPSS: Public Safety Streetlighting Efforts
- PBW: Bond & RDI & Digital Divide Efforts



Purpose



The purpose of this presentation is to introduce Priority Improvement Zones and provide an overview of aligned efforts of several departments within the City to convert streetlighting fixtures to L.E.D. (Light Emitting Diode).



Background



- Upgrading streetlighting is an ongoing need.
- The city has over 80,000 streetlights, the majority of which are owned and operated by Oncor.
- Majority of our streetlights are High Pressure Sodium (HPS) or Metal Halide (MH), which are both less efficient types of lighting than L.E.D.
- Conversion is an expensive and massive undertaking.



Priority Improvement: Lighting as Public Safety



- Multiple studies have shown the efficacy of utilizing enhanced L.E.D. lighting as a crime deterrent.
- Lighting moves beyond eliminating the darkness that provides criminal anonymity and into the realm of increasing a neighborhood's sense of safety and desirability.
- This plan presents a range of strategic solutions focused on transforming the lighting landscape and improve public safety throughout the city.



Priority Improvement: Lighting as Public Safety



- This streetlighting plan is a collaborative effort to support the needs of the community and public safety improvements in Dallas.
- It is an ongoing partnership between:
 - Department of Transportation
 - Department of Public Works
 - Office of Integrated Public Safety Solutions
- This work is not possible without the support of:
ITS, Housing, Code, DPD, and Community Prosecution



Aligned Streetlighting Efforts



- This is not just a multi department effort, but an effort reaching across multi funding sources.
- The task of replacing all streetlights in the city is estimated to be over \$200 million.
- The aligned approach outlined here maximizes our ability to deliver projects in the next 1 to 5 years.



Aligned Streetlighting Efforts



Because of the scope of this task, streetlighting was broken into phases:

1. Phase 1- Internal TRN Conversions in Priority Zones
2. Phase 2- MCIP Projects
3. OIPSS ongoing efforts
4. Covid-Response- Digital Divide Streetlighting Wi-Fi



Aligned Streetlighting Efforts



The City has developed and implemented several equity and public safety based aligned efforts to convert streetlighting.

TRN

OIPSS

PBW

2012
BOND
Funds

MCIP
7th Call

FY21
Budget

2017
BOND

CARES
Funding



Approach to the Streetlighting Challenge



- Given the size of this task, a tool was initially developed as a tool to address areas with the most immediate streetlighting needs.
- This tool was also used more broadly to align strategic priorities throughout the city and funnel investment.



What is a Priority Improvement Zone?



- Priority Improvement Zones are areas in the City of Dallas that have been identified as having urgent need.
- These zones were developed utilizing several factors, which aligned multiple department's economic, equity and safety focus areas.
- They represent a collaborative and comprehensive approach to enhancing City-focused, data-driven decision-making by guiding safety and investment strategies.



Priority Improvement Zone Methodology



The elements included:

1. Market Value Analysis to evaluate the real estate market
Planning & Urban Design
2. Areas with high crime – Target Area Action Grid
Dallas Police Department
3. Areas with violent crime density – Violent Crime Reduction Program
Dallas Police Department
4. Areas with high poverty rates – RECAP
University of Texas at Arlington
5. Areas with high economic stress – Opportunity Zones
U.S. Department of Treasury
6. Areas in need of housing development and improvement
Planning & Urban Design with Department of Housing
7. Areas that align with the High Injury Network – corridors with fatalities & severe injuries
Department of Transportation

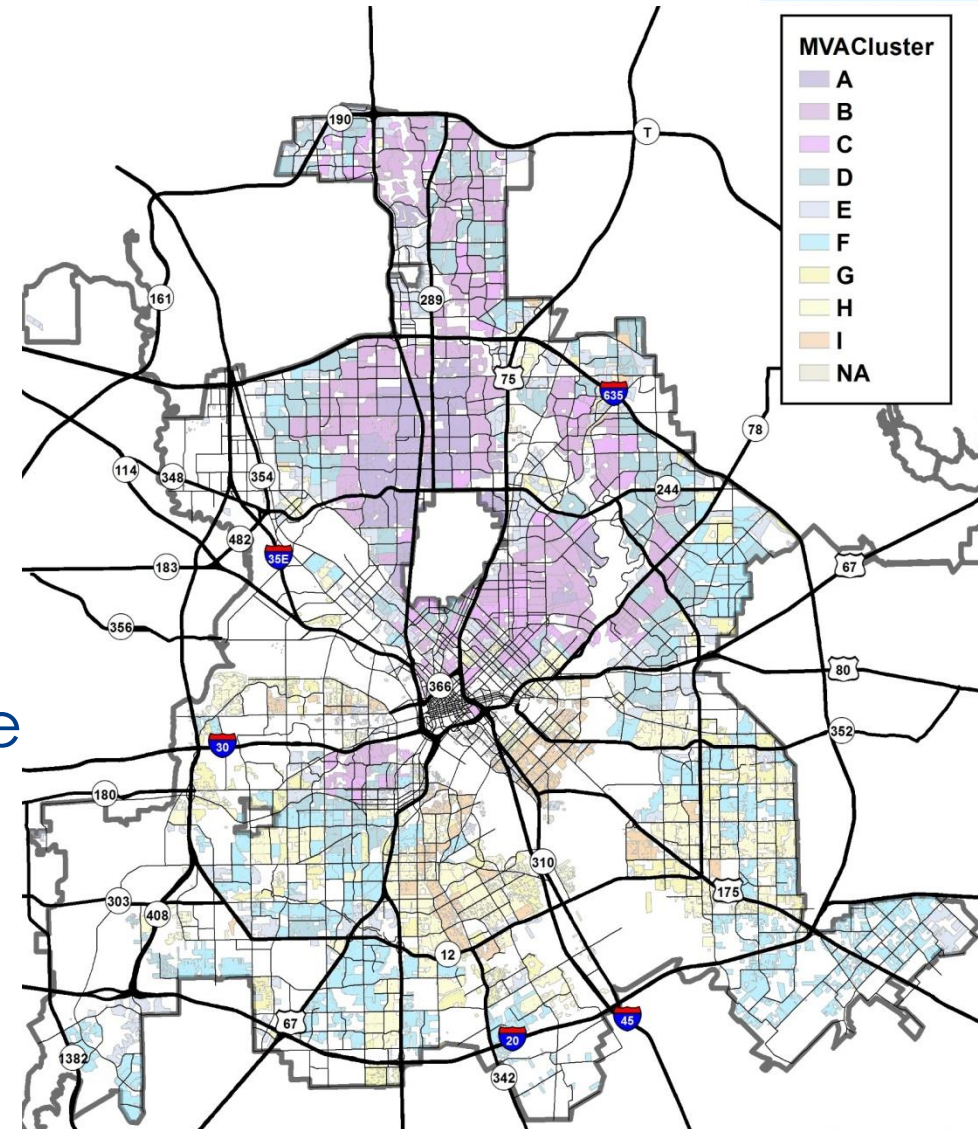


Priority Improvement Zone Methodology



Element 1: Market Value Analysis (MVA)

- Developed by Planning and Urban Design Department
- Analytical tool to assist policymakers, residents, and other stakeholders to understand the local residential real estate market

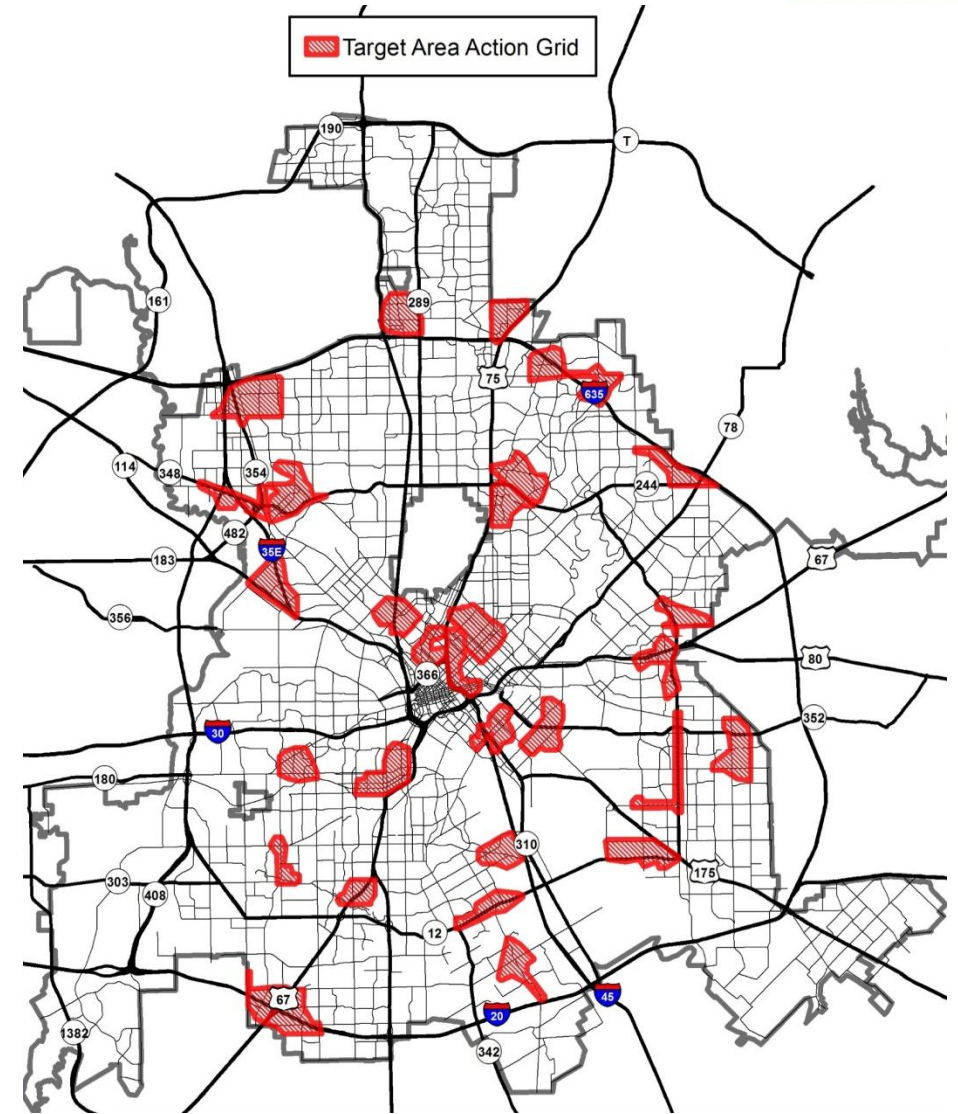


Priority Improvement Zone Methodology



Element 2: Target Area Action Grid (TAAG)

- Developed by the Dallas Police Department
- Areas designated as crime-concentrated
- Locations with increased likelihood of victimization and criminal behavior.

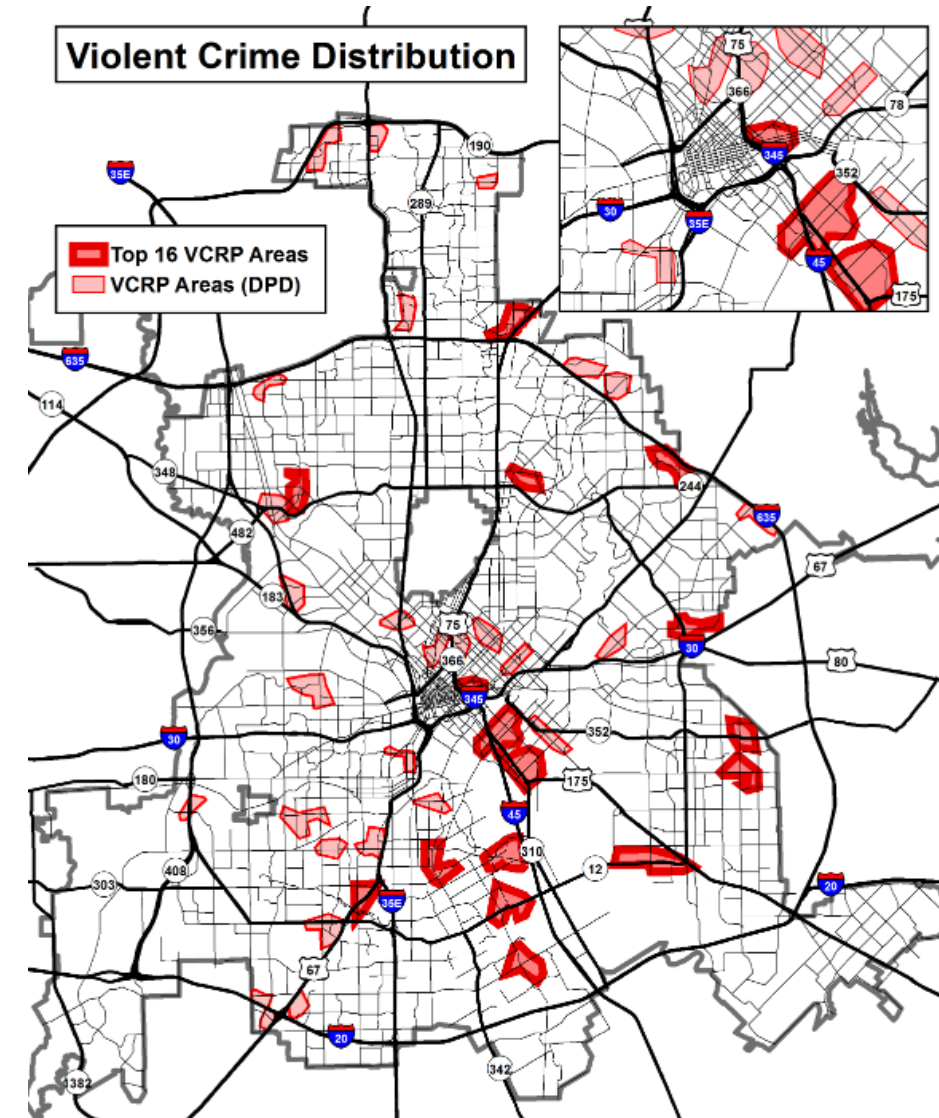


Priority Improvement Zone Methodology



Element 3: Violent Crime Reduction Program (VCRP)

- Developed by the Dallas Police Department
- Areas designated with violent crimes (murder, manslaughter, robbery, and aggravated assault)

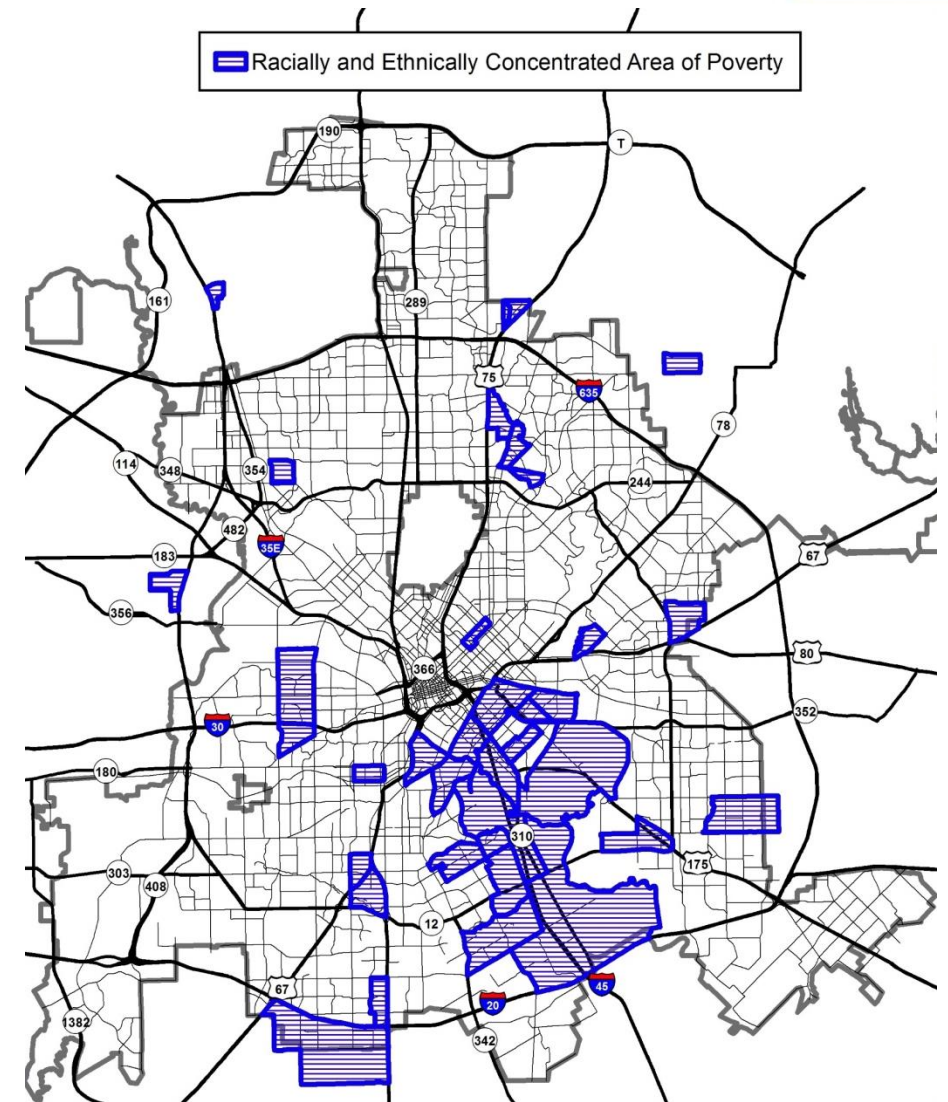


Priority Improvement Zone Methodology



Element 4: Racially and Ethnically Concentrated Areas of Poverty (R/ECAP)

- Based on a study by the University of Texas at Arlington
- Utilized to meet the HUD directive to affirmatively further fair housing opportunities
- Served to aid in understanding poverty themes, such as barriers to transportation access opportunities.

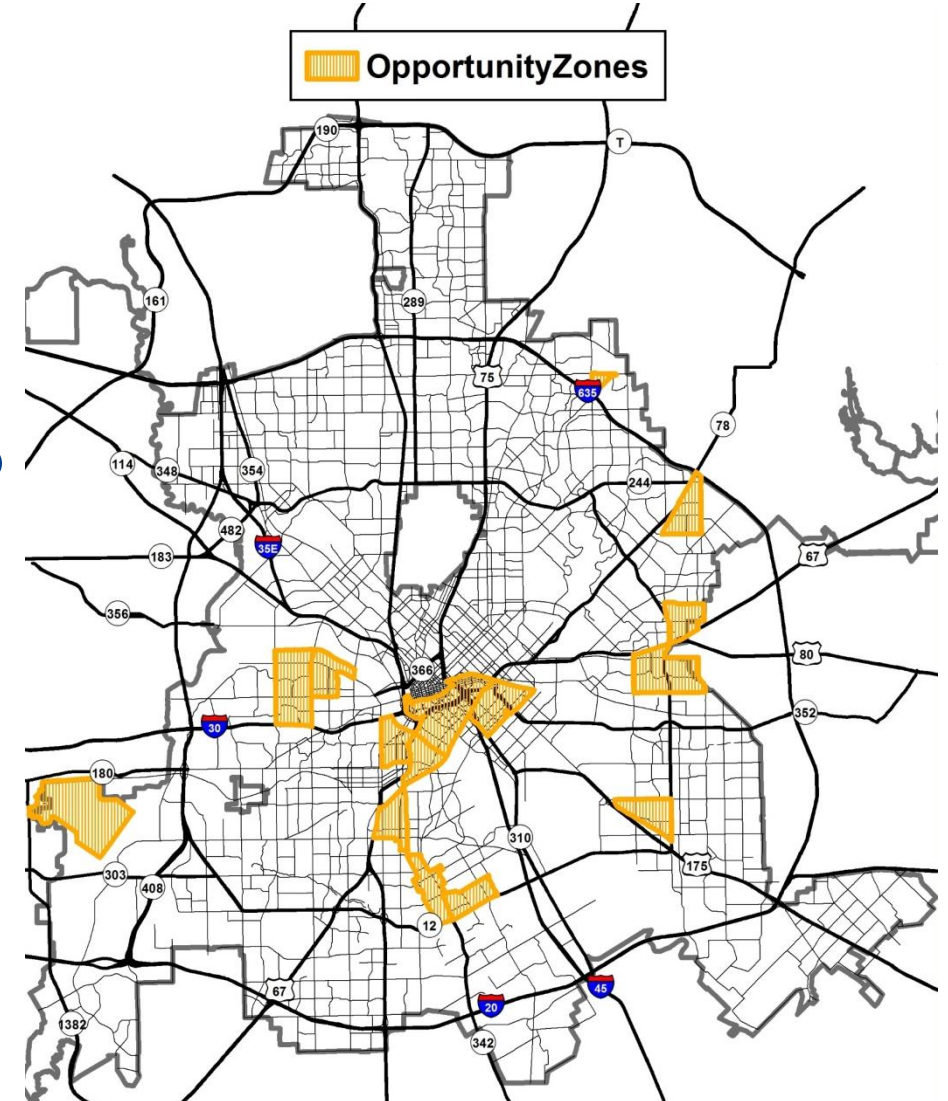


Priority Improvement Zone Methodology



Element 5: Opportunity Zones

- Census tracts that have been designated by a state or territory and certified by the U.S. Treasury as eligible to receive investment through qualified Opportunity Funds.
- These zones were created to spur investment in economically distressed communities.

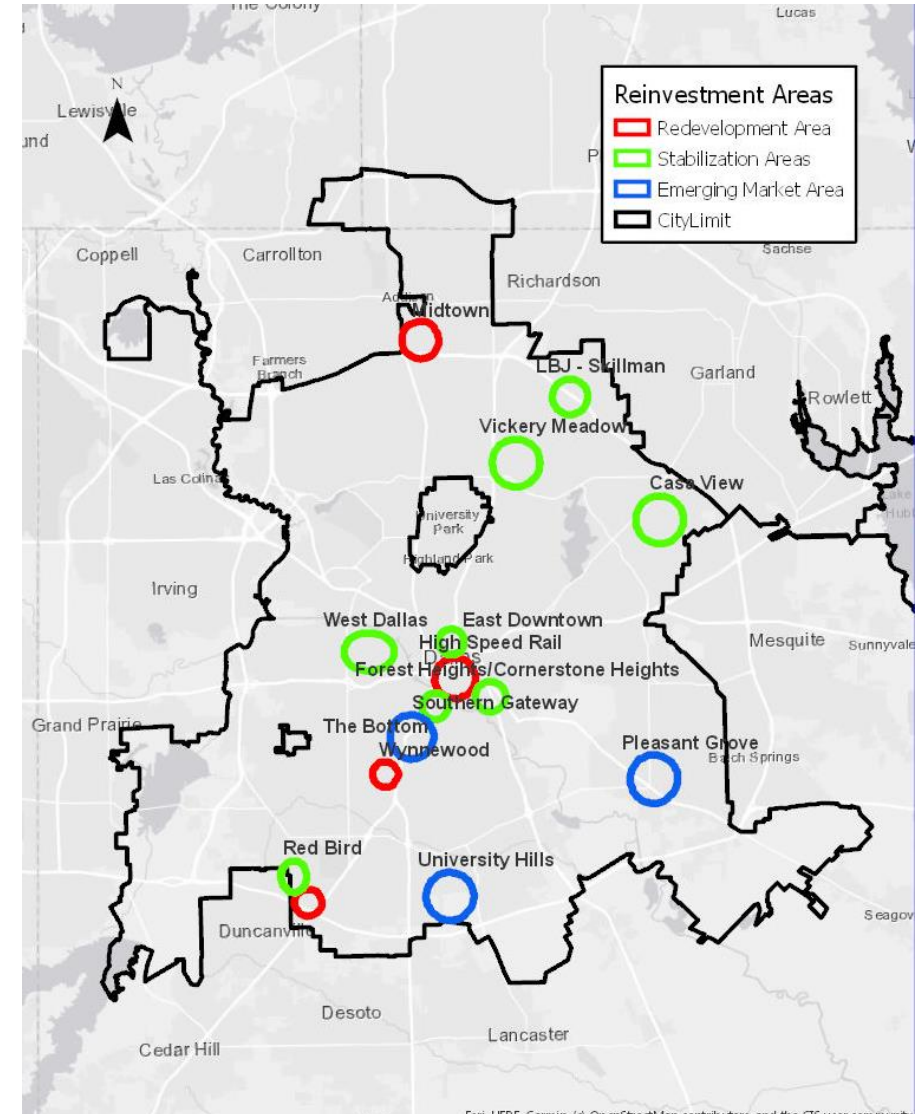


Priority Improvement Zone Methodology



Element 6: Reinvestment Areas

- Developed by Planning and Urban Design
 - Includes:
 - Redevelopment Areas
 - Stabilization Areas
 - Emerging Markets Areas
- *full definitions in Appendix

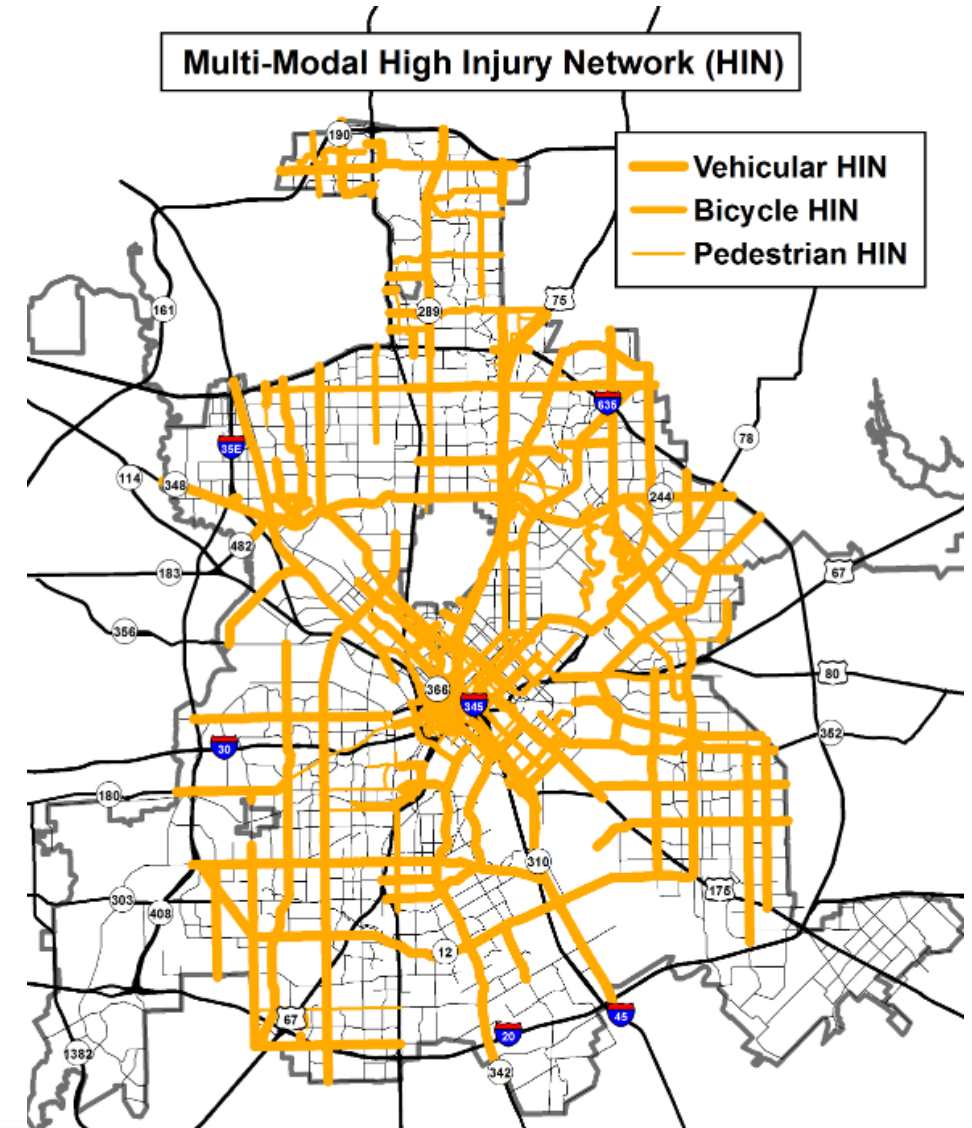


Priority Improvement Zone Methodology



Element 7: High Injury Network

- Developed by the Department of Transportation
- An assessment tool to identify corridors across the city that have the highest rates of fatalities and severe injuries per mile.



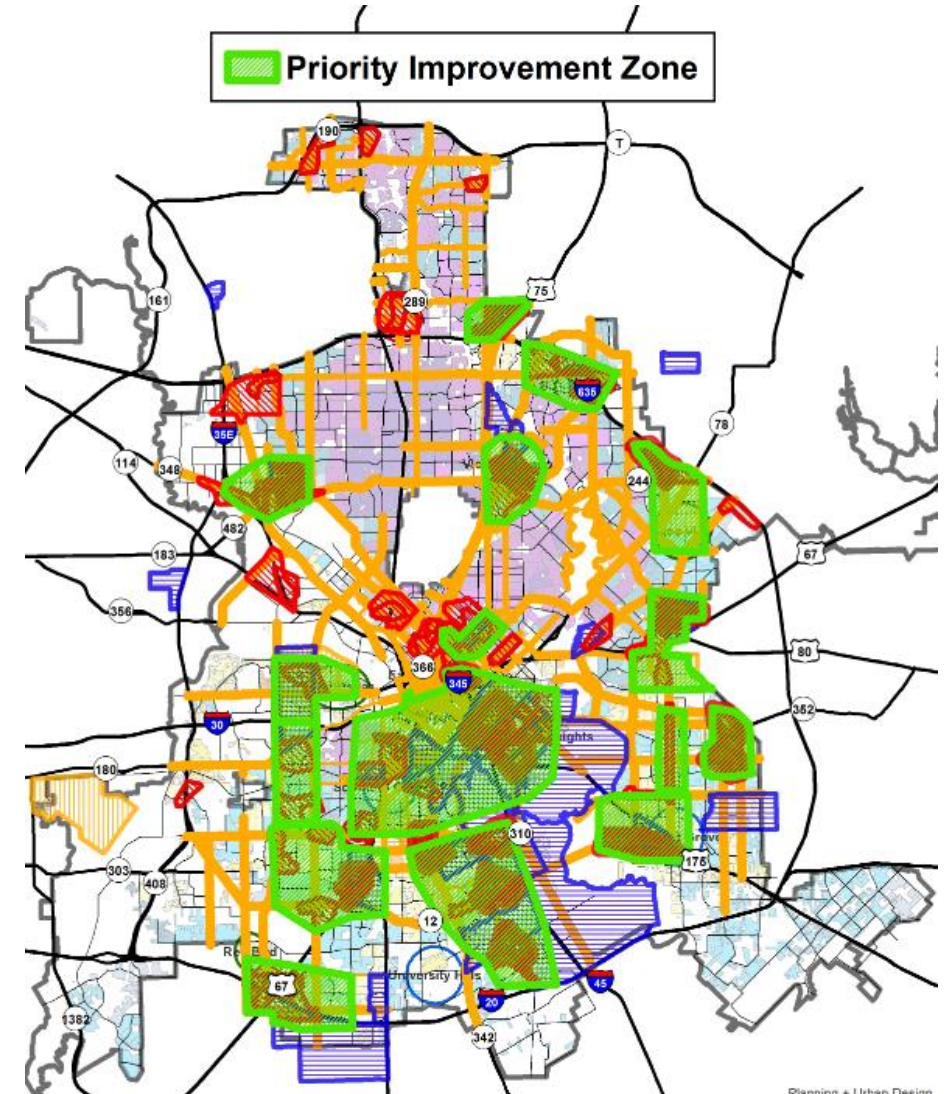
Priority Improvement Zone Methodology



Spatial Analysis

- Overlaid all spatial data from collaborating departments and identified areas where three or more factors converged. This overlay created the 16 priority zones to focus on.

* Matrix Table included in Appendix IV



Planning + Urban Design



16 Priority Improvement Zones



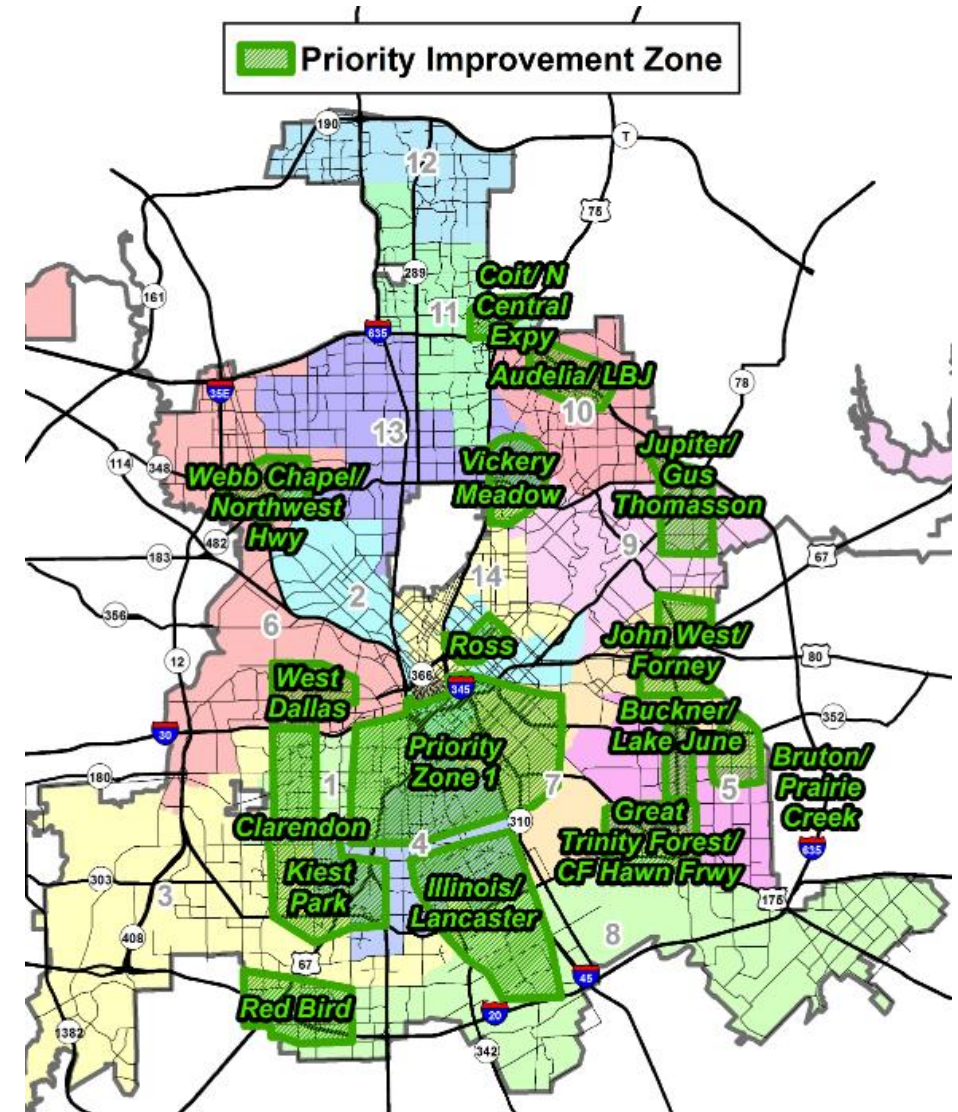
16 Priority Improvement Zones

In Alphabetical Order:

1. Audelia/LBJ
2. Buckner/Lake June
3. Bruton/Prairie Creek
4. Clarendon
5. Coit/N Central Expwy
6. Great Trinity Forest/CF Hawn Frwy
7. Illinois/Lancaster
8. John West/Forney
9. Jupiter/Gus Thomasson
10. Red Bird
11. Kiest Park
12. Priority Zone 1
13. Ross
14. Vickery Meadow
15. Webb Chapel/Northwest Hwy
16. West Dallas

Overlaid all spatial data from collaborating departments and identified areas where three or more factors converged.

*Matrix Table included in Appendix



Priority Improvement Zone Methodology



- Priority Improvements Zone are a living tool, and the data is updated annually.
- Goal is to see zones shrink or shift after interventions and investment.
- This tool provides a citywide, data driven strategic approach to guide the City's safety and community investment strategy.



Aligned Streetlighting Efforts



Several Departments will discuss their current efforts:

1. Phase 1- Internal TRN Conversions in Priority Zones (Mike Rogers)
2. Phase 2- MCIP Projects (Mike Rogers)
3. OIPSS ongoing efforts (David Pughes)
4. Covid-Response- Digital Divide Streetlighting Wi-Fi (Robert Perez)



TRN Priority Improvement Phase I:



City L.E.D. Conversion

- Infrastructure Ownership: City
- Number of Bulbs to be Converted: approx. 1000
- Delivery Timeline: 8-12 months
- Estimated Cost: \$500,000
- Estimated Ongoing Operational Impact: savings of \$1000/month



Priority Improvement Phase I:



City L.E.D. Conversion Strategy:

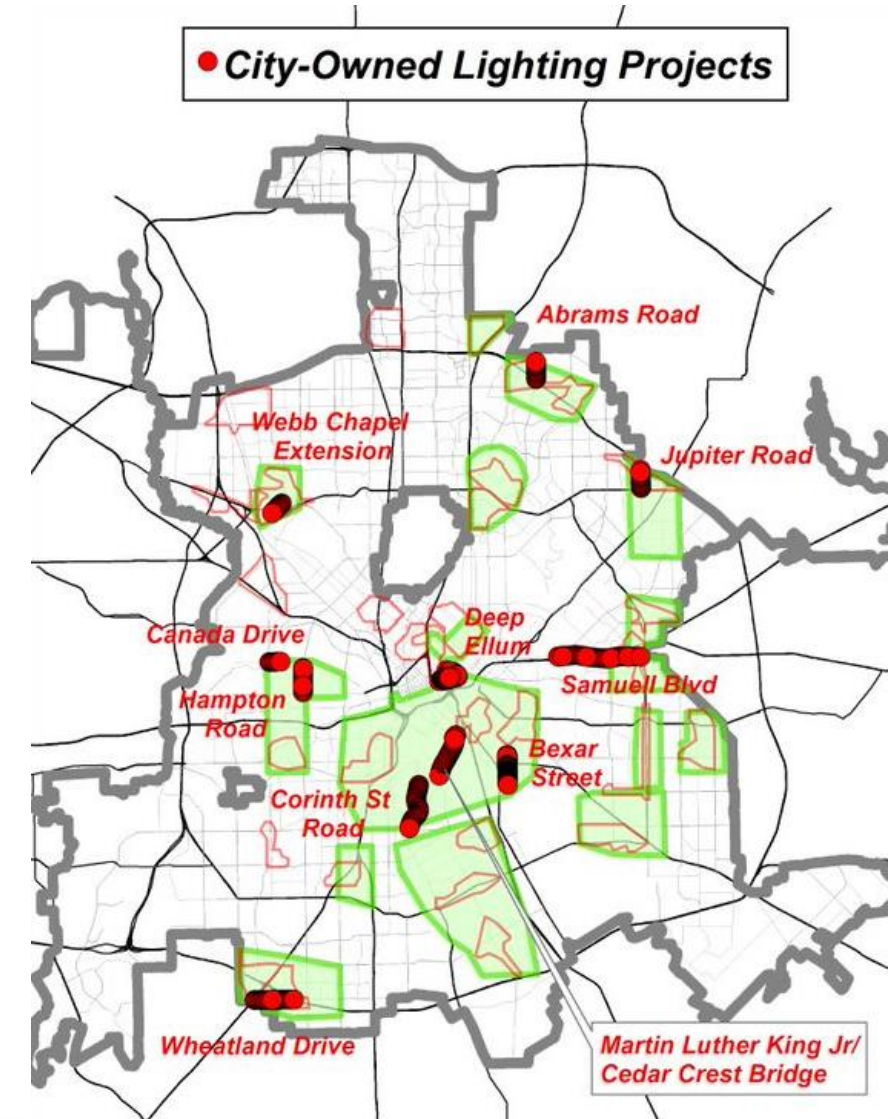
- Concentrated in Priority Improvement Zones
- Targeted City-owned infrastructure because:
 1. Convert quickly (in-house team)
 2. Lower cost to convert to L.E.D. than Oncor-owned
 3. Future operational cost savings



Priority Improvement Phase I:



City LED Conversion: Project Locations



Priority Improvement Phase II:



Partnership Projects Strategy:

- These are areas in great need that require larger scale infrastructure improvements.
- Infrastructure Improvements:
 1. Traffic signals
 2. Pedestrian improvements
 3. Streetlighting incorporated in these projects



Priority Improvement Phase II:



Partnership projects strategy:

Scope: Major capital improvement projects

- Infrastructure ownership: City conversion
- Number of streetlights converted: approx. 500
- 5 major projects

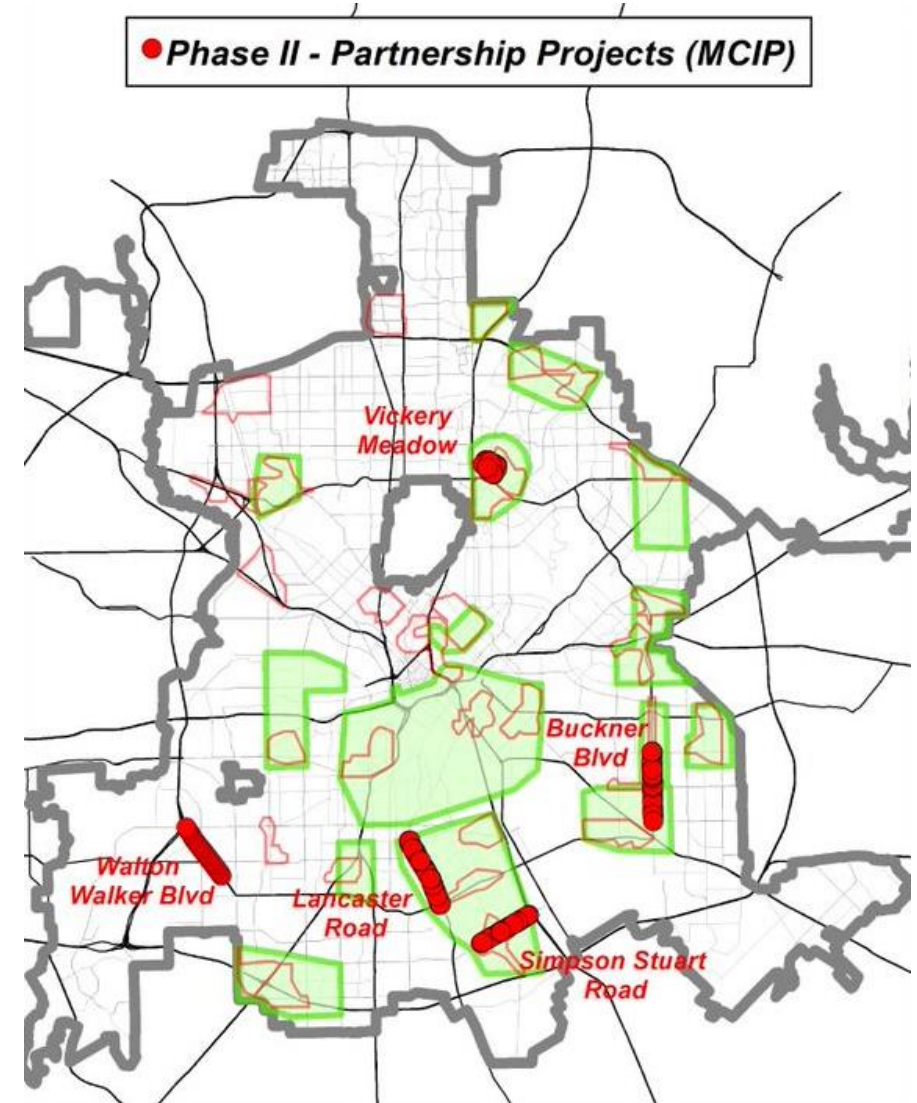


Priority Improvement Phase II:



Partnership Projects Strategy:

1. Walton Walker (D3)
2. Lancaster (D3 & D4)
3. Simpson Stuart (D8)
4. Buckner Blvd (D5)
5. Vickery Meadows (D13)



OIPSS Lighting Ongoing Efforts



- The Office of Integrated Public Safety Solutions (OIPSS) conducts in-depth crime analysis and utilizes Risk Terrain Modeling (RTM) to identify and map high risk areas in the city.
- OIPSS implements and coordinates improvements to the physical environment in these high-risk areas through the installation of new and improved lighting to promote public safety and prevent crime.
- OIPSS is currently working to upgrade lighting in the Malcolm X/Marburg high risk focus area.
 - Oncor streetlights in the commercial corridor along Malcolm X will be converted from high pressure sodium to L.E.D.



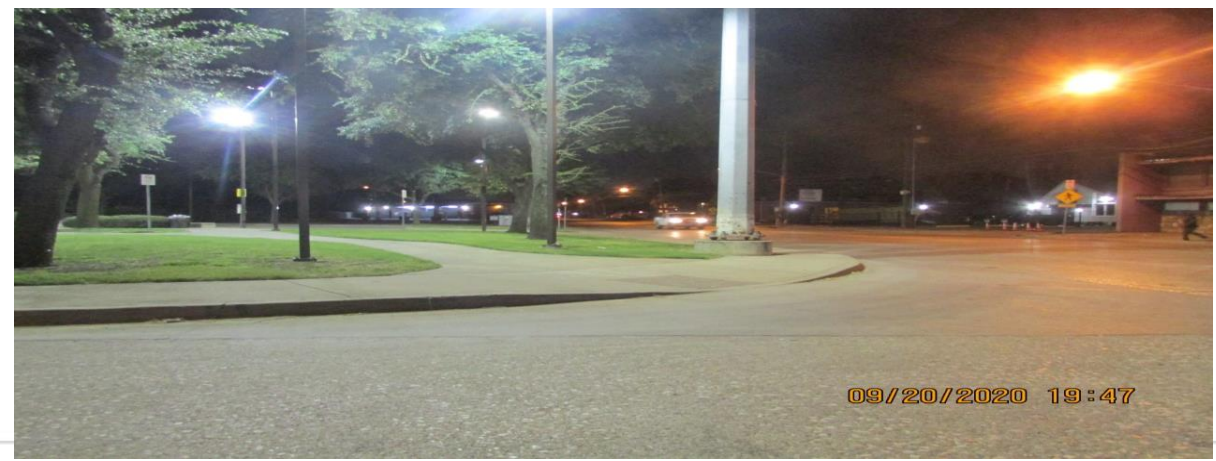
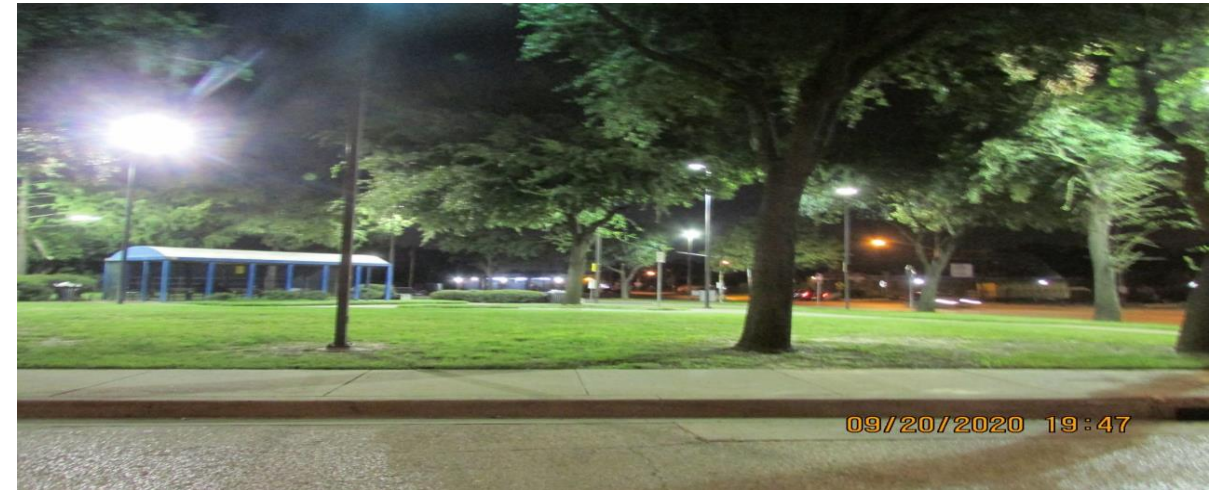
OIPSS Lighting Ongoing Efforts



4500 Malcolm X Blvd



DART Station 4523 Malcolm X Blvd



OIPSS Lighting Ongoing Efforts



- OIPSS and the Child Poverty Action Lab have conducted additional data driven research to identify areas for lighting improvements.
- These locations were developed through the following overlaid spatial data factors:
 - Number of lights
 - Historical nighttime criminal activity
 - Dallas Police Department target areas
 - Violent crimes involving firearms
 - Risk Terrain Modeling
 - Blighted areas – (Identified areas of crime, abandoned and dilapidated buildings and vacant lots)



Streetlight Wi-Fi Pilot Projects



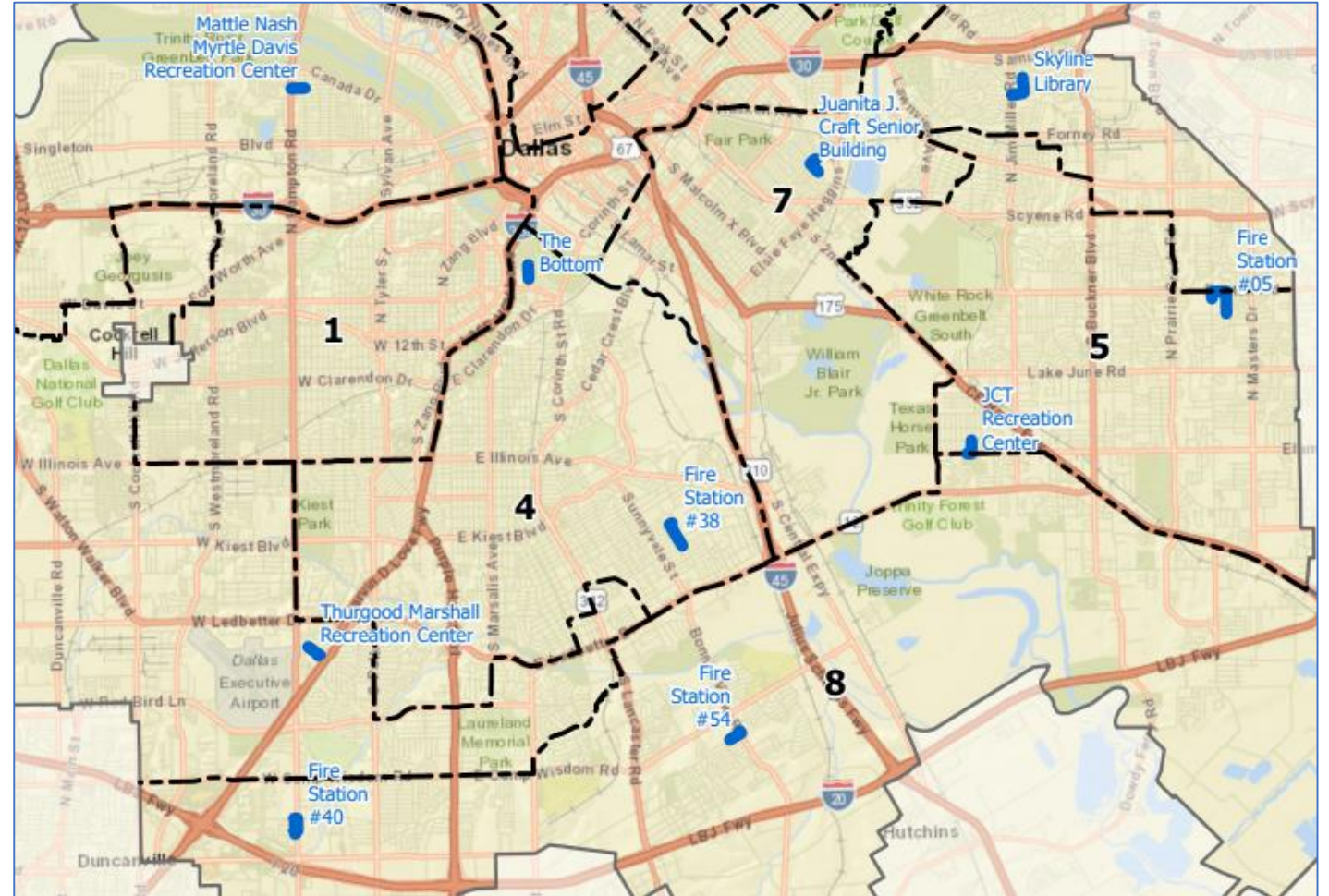
- While also addressing the digital divide, a multi-departmental team is installing (10) streetlight and Wi-Fi pilot projects in low internet access areas
 - Wi-Fi will be available to residents on the designated blocks
 - All (10) of the pilot projects are within the Streetlight Priority Improvement Zones
 - Seven (7) of the pilot projects are within priority zones identified by the Mayor's Safety Task Force



Streetlight Wi-Fi Pilot Projects



- Map of (10) Streetlight Wi-Fi Pilot Projects
- Pilot projects will include telecommunications fiber from the nearest City facility
- Use of CARES Act funding requires project completion by December 30, 2020



Streetlight Wi-Fi Pilot Projects



The (10) Streetlight Wi-Fi Pilot Projects include:

1. Thurgood Marshall Recreation Center: Ariel from Mark Trail to Dove Creek (CD 3)
2. Fire Station #38: Cicero from Wilhurt to Dove Creek (CD 4, MTF)
3. Eloise Lundy Recreation Center: Denley from Hutchins to Reverend CBT Smith (CD 4, MTF)
4. Fire Station #5: Corvette from Bruton to Limestone (CD 5, MTF)
5. Janie C. Turner Recreation Center: Ezekial from Elam to Hoode (CD 5, MTF)
6. Mattle Nash Myrtle Davis Recreation Center: Bayside from Hampton to Puget (CD 6)
7. Juanita J. Craft Senior Center: Frazier from Spring to Marshall (CD 7, MTF)
8. Skyline Library: Symphony from Everglade to Snowbird (CD 7, MTF (partially))
9. Fire Station #40: Kirnwood from Cul-de-Sac to Cul-de-Sac (CD 8, MTF)
10. Fire Station #54: Pinebrook from Bonnie View to Strawberry Trail (CD 8)

Note: MTF indicates projects within the Mayor's Safety Task Force priority zones



Alignment with other Plans and Initiatives



- The aligned streetlighting plan responds to this immediate need with a collaborative and intentional, multi-departments effort.
- This plan supports the lighting effort in the Mayor's Task Force on Safe Communities, and the efforts laid out in DPD's crime reduction plan.
- This plans also supports the Resilient Dallas strategy goals 6 and 7 – investing in neighborhood infrastructure and investing in sustainable infrastructure.



Next Steps



- Immediate execution of Covid Response Streetlighting Wi-Fi.
- Already started deployment of Phase 1 TRN L.E.D. Conversion.
- Preparing for and awaiting funding for MCIP funds to be available and paired with City Budget.
- Continuing ongoing efforts from OIPSS in coordination with partnering Departments, including Code, Transportation, Public Works, City Attorney.
- Will provide semi- annual progress update.



Questions



- Staff is available for your questions.





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Terms & Definitions

- **Priority Improvement Zones** are areas designated by the Department of Transportation (DoT) as zones that qualify as urgent priority for improvement.
- **Opportunity Zones** are census tracts that have been designated by a state or territory and certified by the U.S. Treasury as eligible to receive investment through qualified Opportunity Funds.
- **The Target Area Action Grids (TAAG)** are areas designated by the Dallas Police Department (DPD) as crime dense areas and used to identify grids where there is an increased likelihood of victimization and criminal behavior.
- **Violent Crime Reduction Program (VCRP)** areas are designated by the Dallas Police Department (DPD) as areas with high density of violent crime including, murder, manslaughter, robbery, and aggravated assault.
- **R/ECAP** – Racially and Ethnically Concentrated Areas of Poverty
- The Department of Transportation (DoT) developed a **High Injury Network** assessment tool to identify corridors across the City that have the highest rates of fatalities and severe injuries per mile.
- **The Market Value Analysis (MVA)** is an objective analytical tool developed by Planning & Urban Design that serves to assist policymakers, residents, and other stakeholders to understand the local residential real estate market and help inform policies around housing program design.

Appendix II



Terms & Definitions

REINVESTMENT STRATEGY AREAS: The Housing Policy provides for tiered Reinvestment Strategy Areas to address three (3) market types in need of City investment:

- **Redevelopment Areas:** A redevelopment area is characterized by a known catalytic project that has submitted a request for funding that shows preliminary viability and will begin within the next 12 months. The project as proposed must contain a housing component and must address the existing market conditions as identified in the MVA and must demonstrate a level of housing production supported through a third-party independent market analysis and show affordability to a mix of income bands.
 - Redevelopment Areas: Midtown, High Speed Rail, Wynnewood, and Red Bird.
- **Stabilization Areas:** Stabilization areas are characterized as G, H, and I markets that are surrounded by A-E markets and as such are at risk of displacement based on known market conditions including upcoming redevelopment projects. These areas are also where Incentive Zoning and Accessory Dwelling Units should be focused to allow for increased density.
 - Stabilization Areas: LBJ Skillman, Vickery Meadow, Casa View, Forest Heights / Cornerstone Heights, East Downtown, The Bottom, West Dallas, and Red Bird North.
- **Emerging Market Areas:** These markets are characterized as areas in need of intensive environmental enhancements, master planning and formalized neighborhood organization. In order to facilitate the creation of mixed income developments, the City recommends seeking designation as Neighborhood Revitalization Strategy Areas (NRSA's) through HUD in order to prepare the area for real estate investments in a 3 to 5-year time frame and provide flexibility of use of funds without income qualifications. trust in local government and aid staff in assessing the need for strategic partnerships.
 - Emerging Market Areas: Southern Gateway, Pleasant Grove, and University Hills

Source: Comprehensive Housing Policy

<https://dallascityhall.com/departments/housing-neighborhood-revitalization/DCH%20Documents/Adopted%20Housing%20Policy.pdf>



Appendix III



Legend Definitions

Priority Improvement Zone

Priority Improvement Zones are areas designated by the Department of Transportation (DoT) as zones that qualify as urgent priority for improvement. These areas are represented in **green**.

Opportunity Zone (Planning and Urban Design)

The Tax Cut and Jobs Act of 2017 included the creation of **Opportunity Zones** to spur investment in economically distressed communities. These areas are represented in **orange**.

TAAG Area – Target Area Action Grid

The **Target Area Action Grids** (TAAG) are areas designated by the Dallas Police Department (DPD) as crime dense areas and used to identify grids where there is an increased likelihood of victimization and criminal behavior. These areas are represented in **red**.

VCRP Area – Violent Crime Reduction Program

The Violent Crime Reduction Program (VCRP) are areas designated by the Dallas Police Department (DPD) as violent crime dense areas that contain crimes such as, murder, manslaughter, robbery and aggravated assault. These are represented in **deep red**.

R/ECAP – Racially and Ethnically Concentrated Areas of Poverty

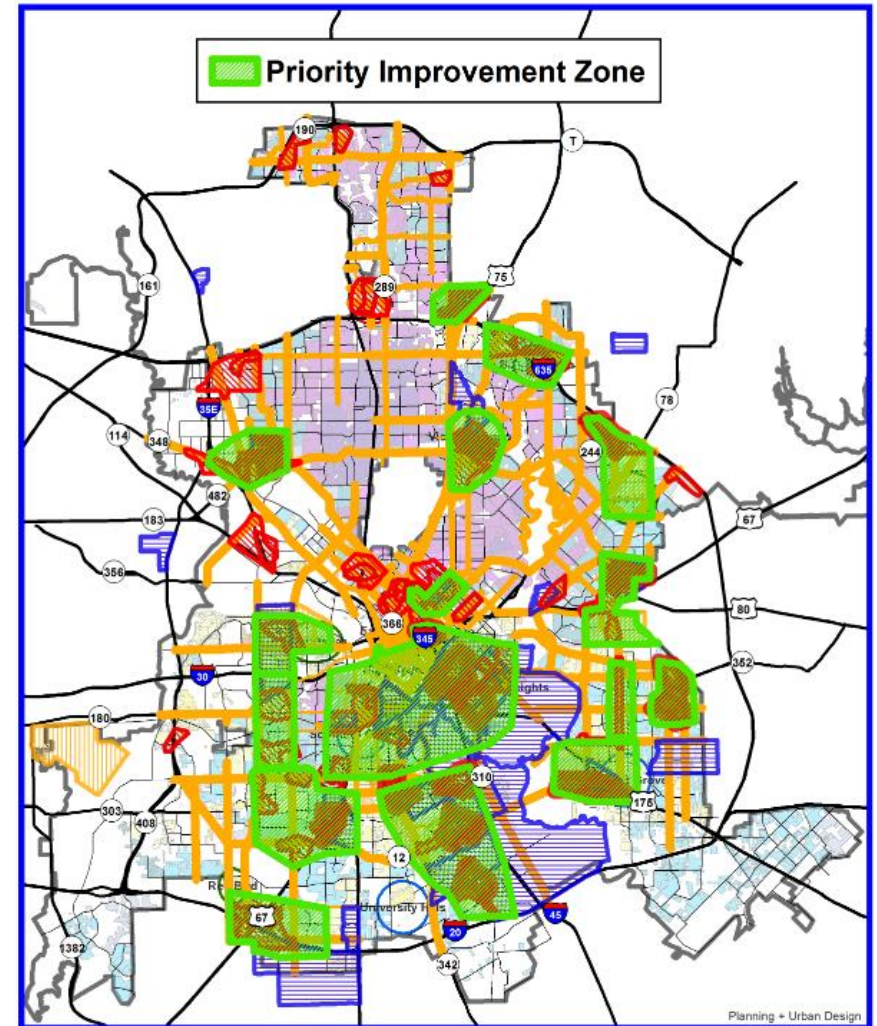
Based on a study by the University of Texas at Arlington, and as an element of the City's analysis to meet the HUD directive to Affirmatively Further Fair Housing, identifying **Racially/Ethnically Concentrated Areas of Poverty** (R/ECAP) adds understanding to areas of growing racial/ethnic and economic segregation, inequities, affordability pressures, and barriers to access opportunities (e.g. transportation). These areas are represented in **blue**.

High Injury Network

The Department of Transportation (DoT) developed a **High Injury Network** assessment tool to identify corridors across the City that have the highest rates of fatalities and severe injuries per mile. These areas are represented by **yellow** lines.

MVA – Market Value Analysis

The **Market Value Analysis** (MVA) is an objective analytical tool developed by Planning & Urban Design that serves to assist policymakers, residents, and other stakeholders to understand the local residential real estate market and help inform policies around housing program design. These areas are represented by color-coded market types (A - I).



Appendix IV



Priority Improvement Zone Name	Council Districts	Racially and Ethnically Concentrated Areas of Poverty	Opportunity Zones (Planning and Urban Development)	Reinvestment Areas (Housing)	Target Area Action Grid (Police Department)	Top 16 VCRP (Count)	Market Value Analysis Clusters (Planning and Urban Development)	High Injury Network (Transportation Department)	Highly Congested Roads (Transportation Department)
Priority Zone 1	1, 4, 2, 7	27.01, 27.02, 34.00, 38.00, 40.00, 41.00, 47.00, 86.03, 89.00, 115.00, 203.00	20.00, 41.00, 54.00, 203.00, 204.00	Forest Heights (Stabilization), Southern Gateway (Emerging Market), The Bottom (Stabilization), Highspeed Rail (Redevelopment)	S Central-Julius Schepps, Elsie Faye Heggins-Scyene, Jefferson Corridor	3	B, C, D, E, G, H, I	Beckley, Cadiz, Corinth, Davis, Malcolm X, Lamar, 2nd, Pine, Martin Luther King Jr,	none
Illinois/ Lancaster	3, 4, 8	86.03, 86.04, 88.02, 87.01, 114.01, 202.00	57.00, 87.04	none	Priority	4	E, F, G, H, I	Illinois, Ledbetter/ Great Trinity Forest	Illinois
Red Bird	3, 8	166.05	none	Red Bird (Redevelopment and Stabilization)	Camp Wisdom-Westmoreland, Camp Wisdom-Chaucer	0	E, F, G, H, I	Hampton, Wheatland, LBJ	Cockrell Hill
Jupiter/ Gus Thomason	9, 10	none	127.01	Casa View (Stabilization)	Walnut Hill-Jupiter	1	E, F, G, H	Northwest Hwy, Jupiter, Garland, Gus Thomason, Ferguson	Jupiter, Ferguson, Garland, Shiloh, Northwest Hwy
Audelia/ LBJ	10	none	185.05	LBJ-Skillman (Stabilization)	Greenville-LBJ, Forest-Audelia	0	C, D, E, H	Forest, Skillman, LBJ SR	Forest, Greenville, Audelia, Skillman, Abrams
Great Trinity Forest/ C F Hawn Frwy	5, 8	93.04	93.01	Pleasant Grove (Emerging Market)	Loop 12-Jim Miller, Lake June-Buckner	1	E, G, H, I	Buckner, Great Trinity Forest	Buckner/ Lake June
Vickery Meadow	9, 10, 13, 14	78.15, 78.20	none	Vickery Meadow (Stabilization)	Central-Southwestern, Five Points	1	E, G, H	Skillman, Central, Northwest Hwy	Northwest Hwy, Greenville, Skillman
Webb Chapel/ Northwest Hwy	2, 6	98.04	none	none	Webb Chapel-Timberline	1	E, F, H, G, I	Northwest Hwy, Lombardy, Webb Chapel, Community	Northwest Hwy
John West/ Forney	7	none	122.07, 123.02	none	John West-Buckner, Ferguson-I30	1	D, E, F, G	Samuell, Buckner	Buckner
Ross	2, 14	15.03	none	none	Ross-Bennett, Monument-Good Latimer	0	A, C, E, G	Ross, Live Oak, Gaston	Live Oak
West Dallas	6	205.00	205.00	West Dallas (Stabilization)	none	0	D, E, G, I	Hampton/Singleton	Singleton, Hampton, Westmoreland
Bruton/ Prairie Creek	5, 7	none	none	none	St Augustine-Bruton	2	E, F, G, H	Scyene, Bruton, St Augustine, Masters	Masters
Coit/ N Central Expwy	11	192.12, 192.13	none	none	Coit-Spring Valley	1	E, F, H, I	Coit, LBJ, N Central Expwy	Coit, Spring Valley
Buckner/ Lake June	5, 7	none	none	none	Lake June-Buckner	0	E, F, H, I	Buckner, Bruton	Buckner
Kiest Park	1, 3, 4	60.01, 60.02	none	none	Kiest-Polk, Kiest-Westmoreland	1	E, F, G	Loop 12, Beckley	Loop 12
Clarendon	1, 3	69.00	none	none	Fort Worth-Davis	0	D, E, F, G, H	Hampton, Westmoreland, Fort Worth	Hampton, Westmoreland



Team Members that made this possible



- Majed Al-Ghafry, CMO
- Michael Rogers, TRN
- Ghassan Khankarli, TRN
- Micheal Driggars, TRN
- Srinivasa Veeramallu, TRN
- Maria Durcanska, TRN
- Heather Murphy, TRN
- Kent Austin, TRN
- Daniel Peters, TRN
- Chief Anderson, DPD
- Chief Pughes, OIPSS
- Sergeant Beatty, DPD
- Robert Perez, PBW

