The Mohawk Valley

Looking Forward

Frank P
@ GOP Oct 5, 2015
9:15 → Midnight

Utica/Mohawk Valley

Major depression after World War II

- Region lost 10,000 railroad jobs
  (Railroad also paid 10% of Utica's property tax)
- Region lost over 20,000 textile jobs as companies moved to the south

"Loom to Boom" effort
(starting mid 1950s)

- What will be the next economic development driver?

  ✓ Regional guess: the "Cold War", manufacturing, computers

- Textile industry depressed advanced education opportunities – Utica was the last major New York State city without colleges (both MVCC and Utica College were founded in 1946)

- Turning a "Mill Town" into a post World War II urban center

Loom to Boom

1. Education   Two year and four year colleges: tech, trade and health programs

2. Transportation   Airport, passenger service, improved highways

3. Health   New hospital, expanded services

4. Jobs   Manufacturing: Military and consumer products, military facilities (Cold War)

5. Quality of Life   Cultural, art, and social facilities

Loom to Boom
(starting in late 50's)

New Hospital   St. Luke's (1960s)

First designed with two layered tensile cables with dampers, handicapped access

New Auditorium   MWP 1960

New Art Museum   Utica College 1960

New College Campus   MVCC 1960

Loom to Boom continued

New Airport — Located in Oriskany with office building and maintenance facilities for an airline

New Airlines — Mohawk Airlines (became first regional airline with full jet service)

New SAC Air Force Base — Griffiss (with B-52s)

Flight Attendant School — Mohawk Airlines at MVCC

Air Frame & Power Plant School — Riverside at Marcy

Loom to Boom continued

New Highways

New York State Thruway (1952-56)

North-South Arterial (4 lanes)

Route 365 (4 lanes)

Route 49 (Utica – Rome 4 lanes)

North Genesee/Bagg's Square

Burrstone Road Bridge

Route 5S (Utica to Ilion - 4 lanes)

(last 3 – 1970s)

Loom to Boom continued

New Industries

GE radio and GE Aerospace –
8,000 jobs

Bendix

Chicago Pneumatics

Univac*

Cogar*

New Four Year Tech College

SUNY IT (1966)

Initially no clear mission

New campus (1980)

*this was the nation's first Silicon Valley (Utica, Binghamton, Hudson Valley)

Loom to Boom continued

What happened?

- **No** sustainability plan
- Computer industry – good at hardware, but did not see the opportunities in "software"
- No entrepreneurial effort/spinoff industries

Today's Opportunities

1. Nano tech industry **and** "Network" with Nano Tech efforts from Albany to Buffalo

2. SUNY Poly growth in student enrollment and in four year, masters and doctoral programs

3. Highway improvements: North South Arterial (July 2017), Broad to Aud redesign (9.4 million)

4. Griffiss expansion: Passenger service, Global freight, cyber security, drones, airplane maintenance jobs and education

5. Turning Stone expansions

Today's Opportunities continued

6. Utica Comets/Mohawk Valley Garden:
   2014-15 season – 2300 season tickets
   Attendance: 141,300 tickets sold out of
   145,200: 97.3% seats sold

7. Loft apartment construction:
   over 150 completed by end of 2015

8. Utica Harbor Development

9. New Medical Center (400-500 Million): 300 million in state
   budget with additional developments at Faxton, St. Luke's, St.
   Elizabeth's and Mohawk Valley Psychiatric Center

Today's Opportunities continued

10. Erie Canal Projects – Rome, Utica, Frankfort, Ilion, Herkimer, Little Falls (Sylvan Beach and New London should be considered)

11. Agricultural Expansions – locally-grown products, craft beers, hops, wine

12. Expansion of college programs – for example, MVCC Fab Lab (3D Manufacturing) in 2015

13. Entrepreneurship Programs

14. Tourism

Bagg's Square

1. Marketing survey and new logo – Michelle Truett

2. Lower Genesee Street – Utica Roasting Company, Tailor and the Cook (top 50 restaurants), Master Pizza, "Thincubator" – MVCC, Utica Bread (mid 2015)

3. Burchard Lane – Pedestrian Lane

4. Bagg's Square Monument Rehabilitation Project – Elfun Volunteers

5. Hotel Street lofts (first floor commercial)

Bagg's Square continued

6. Former James Hotel Site – brownfield and development
7. ConMed buildings (luxury apartments, first floor commercial)
8. Expansion of Oneida County Public Market
9. Master Plan – Cornell students
10. Auditorium Redevelopment Projects
11. Gerbers Grill (speakeasy)
12. Proposed Art Gallery (Liberty Street)
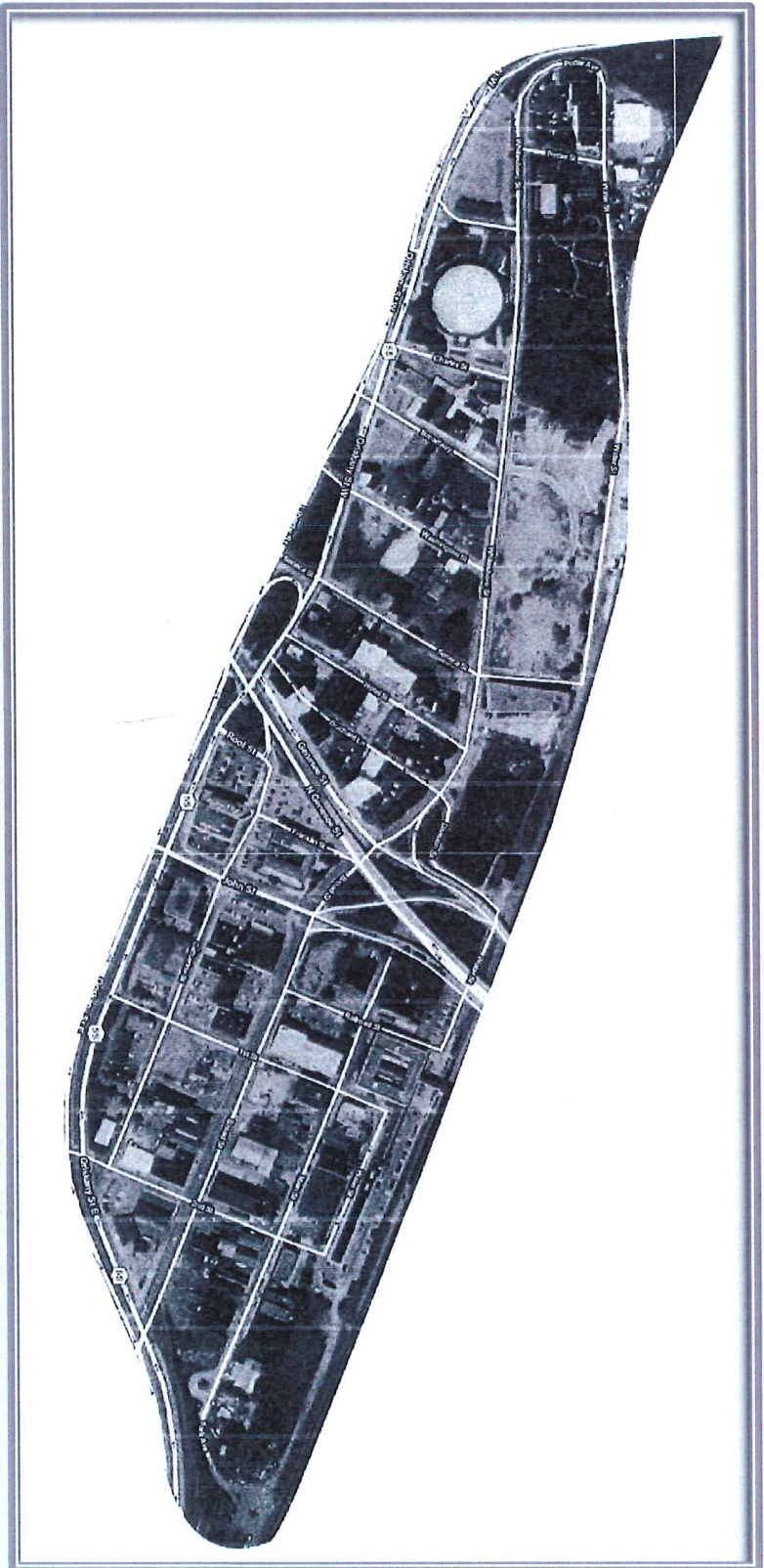13. National Grid Streetscape Program – $250,000

WELCOME TO

BAGG'S SQUARE
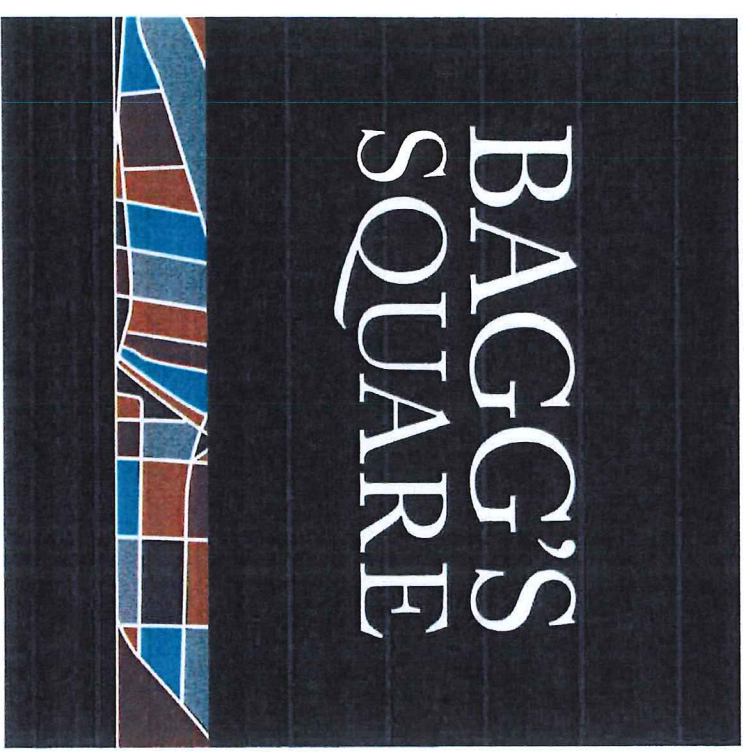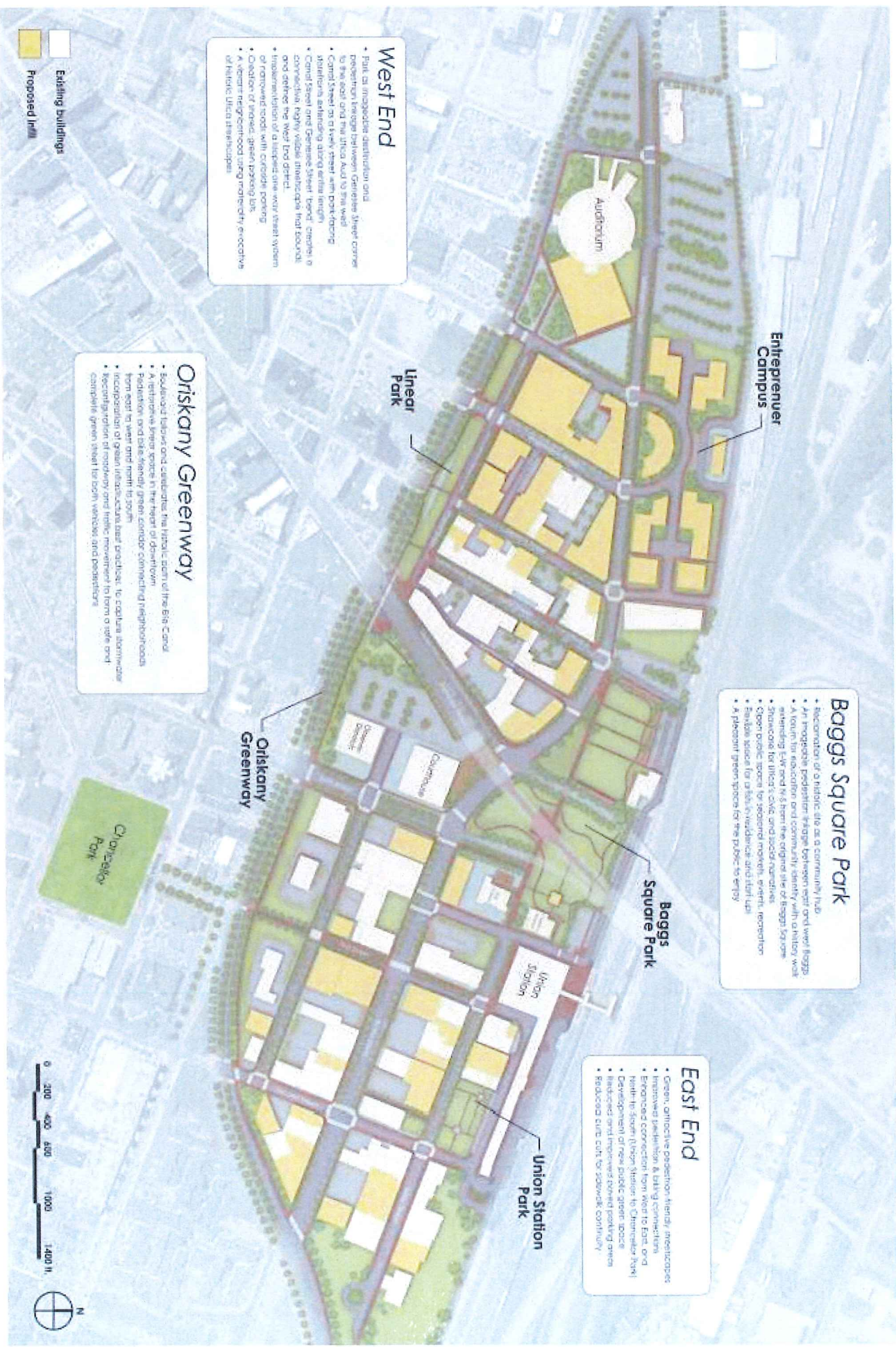
ALWAYS MAKING

History

484design 2/5/14

Satellite Map of Bragg's Square Boundaries

☐ BAGGS SQUARED

Baggs Square Park

- Recreation of a historic site as a community hub
- An imaginative linkage between east and west Baggs
- A forum for education and community identity with a history walk extending E-W and N-S from the original site of Baggs Square
- Showcase for UITCA's civic and social narratives
- Open public space for seasonal markets, events, recreation
- Flexible space for artists in residence and start ups
- A pleasant green space for the public to enjoy

West End

- Park as imageable destination and pedestrian linkage between Genesee Street corner to the east and the Utica Aud to the west
- Canal Street as a lively street with park-facing storefronts extending along entire length
- Canal Street and Genesee Street 'bend' creates a connective, highly visible streetscape that bounds and defines the West End district
- Implementation of a looped one-way street system of narrowed roads with curbside parking
- Creation of shared, green parking lots
- A vibrant neighborhood and a pragmatically evocative of historic Utica streetscapes

Oriskany Greenway

- Boulevard follows and celebrates the historic path of the Erie Canal
- A restorative linear space in the heart of downtown
- Pedestrian and bike-friendly green corridor connecting neighborhoods from east to west and north to south
- Incorporation of green infrastructure best practices to capture stormwater
- Reconfiguration of roadway and traffic movement to form a safe and complete green street for both vehicles and pedestrians

East End

- Green, attractive pedestrian-friendly streetscapes
- Improved pedestrian & biking connections
- Enhanced connection from West to East, and North to South (Union Station to Chancellor Park)
- Development of new public green space
- Reduced and improved shared parking areas
- Reduced curb cuts to sidewalk continuity

Entrepreneur Campus

Linear Park

Auditorium

Oriskany Greenway

Courthouse

Union Station

Baggs Square Park

Union Station Park

Chancellor Park

Legend
Existing buildings
Proposed infill

0 200 400 600 1000 1400 ft.

N

ORISKANY GREENWAY

Erie Canal Linear Park

Oriskany Greenway

Existing Conditions West Oriskany Section View

Proposed Conditions West Oriskany Section View

Roundabout ?

Intersections and Crossings

BAGGS SQUARE PARK

SITE PLAN

Baggs Square Park

Union Station

N. Genesee Street

Park Circulation & Community Cornerstones
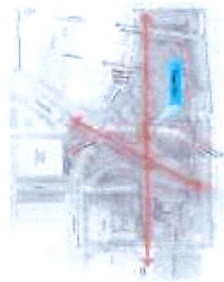
Extending Public Space
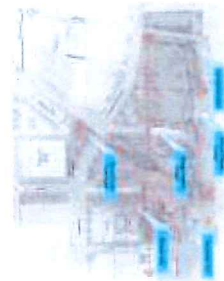
The Loop Walk | 4000 Ft | 20 Minute Walking

Connecting to the Mohawk River, Water as Life & Habitat

Park Events & Programming
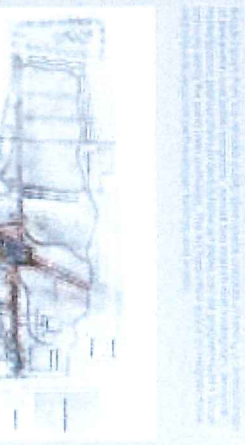
Nighttime & Safety Plan
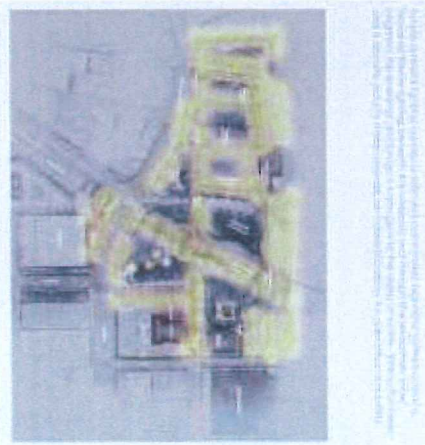
Varick Street

1. New winery and restaurant
2. North South Arterial project
   a. New parking area for 200 vehicles
   b. New exit ramp from Oriskany Street to Varick Street
   c. New bike trail to Bagg's Square and Oneida Square
   d. New streetscape – gas lamps
   e. Retaining wall art murals

Vatick Street continued

3. Art Gallery and Art Student Housing (Corner Whitesboro, Columbia, and Schuyler)

4. Columbia Square Redevelopment

5. Expand Brewery District (along Lenox Avenue to Oswego Street including housing program)

6. Saranac Brewery Expansion

7. Several new restaurants and craft beer tasting

MILL SQUARE
PROFESSIONAL OFFICES

Downtown Utica

Oneida Square to Bagg's Square

1. Marketing survey and new logo – Michelle Truett
2. Landmarc building (former HSBC), lofts, apartments, first floor commercial, rooftop restaurant
3. M&T Bank Building Office rehabilitation for Bassett Healthcare
4. Bleecker Street streetscape and building rehabilitation (loft apartments)
5. Several Genesee Street loft projects

Downtown Utica

Oneida Square to Bagg's Square continued

6. Genesee Street streetscape program
7. Mill Square Lofts (State Street)
8. Stewart Market (corner State and Court Street)
9. Oneida County parking (Elizabeth Street)
10. Oneida Square Festival (May 9)
    One World Flower Fest: organized by Cornell R2G students

GET TO KNOW A NEW

DOWN TOWN UTICA

GET FREE PROMOTION FOR YOUR BUSINESS.

Are you a business located in Downtown Utica that would like some free promotion on our Facebook page?

Help us get to know you better! Reach almost 2,400 people who are looking to support and are excited about Downtown. Please message us via Facebook OR email Michelle Truett at michelle@484design.com and give us the "Top 5" things that people should know about your business. We post a new business every Tuesday.

REMEMBER:

✓ *Keep it short and sweet!* If you write too much, the type size will get too small on Facebook for people to read. Plus, if it looks too long at first glance, people may not take the time to read it.

✓ *Be awesome and interesting.* Use unique facts, talk about the owners' backgrounds, your history downtown, some cool "did you knows" on the company, any awards you've won, upcoming expansions or projects.. you get the point!

✓ *Include your logo* - high resolution JPEGs or PNGs are great. We can also include your hours, if that's applicable.

f.COM/DOWNTOWNUTICA

RECENT SAMPLES:

TOP5TUESDAY
5 THINGS YOU SHOULD KNOW ABOUT

Nicky's CAFE & CATERING

Lady J's
32 Bank Place
Hours:
Tues - Sat.
9am - 1:30pm
1st and 3rd Sundays
11am - 7pm

DOWN TOWN UTICA

TOP5TUESDAY
5 THINGS YOU SHOULD KNOW ABOUT

The Fort Schuyler Club
Founded 1883

DOWN TOWN UTICA

Save the Date

one WORLD flower fest
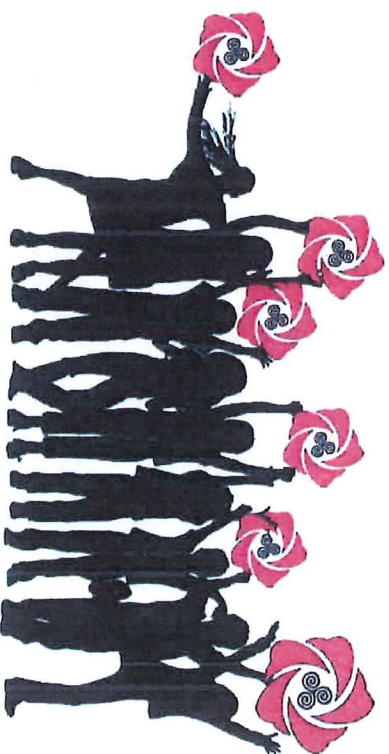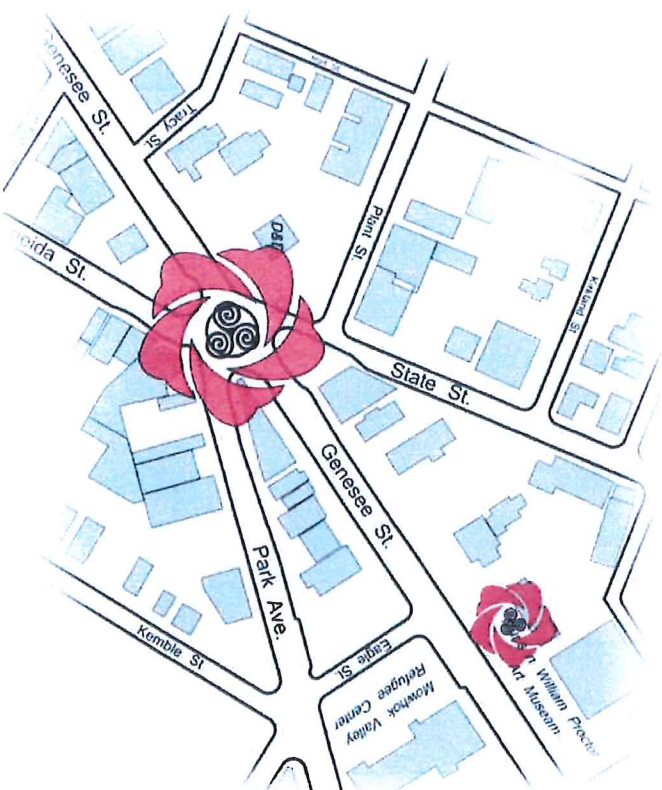
Come celebrate the Oneida Square neighborhood art, culture and diversity!

May 9, 2015
Oneida Square, Utica NY
11am - 4pm

Stay Connected Through the Festival Website:

www.oneworldflowerfest.com

International District

Bleecker, Albany, and Mohawk Streets

1. Streetscape program
2. Building façade program
3. Several new businesses on Bleecker Street (check them out)

Rome

1. Water Front Park – Mill Street

2. Building Facade Program
   East Dominick St.
   James Street

3. Bike Trail along Mohawk River
   From Erie Canal to Upper Black River Blvd.

4. Erie Canal Waterfront Network
   Rome, Utica, Frankfort, Ilion, Herkimer,
   and Little Falls

ONEIDA
10 MILE BIKE TRAIL

CANASTOTA

CANAL TRAIL

NY CENTRAL RR

NY WEST SHORE RR

ONEIDA

O&W RR

SYLVAN BEACH

MUNNSVILLE

UTICA NORTH/SOUTH ARTERIAL

TURNING STONE
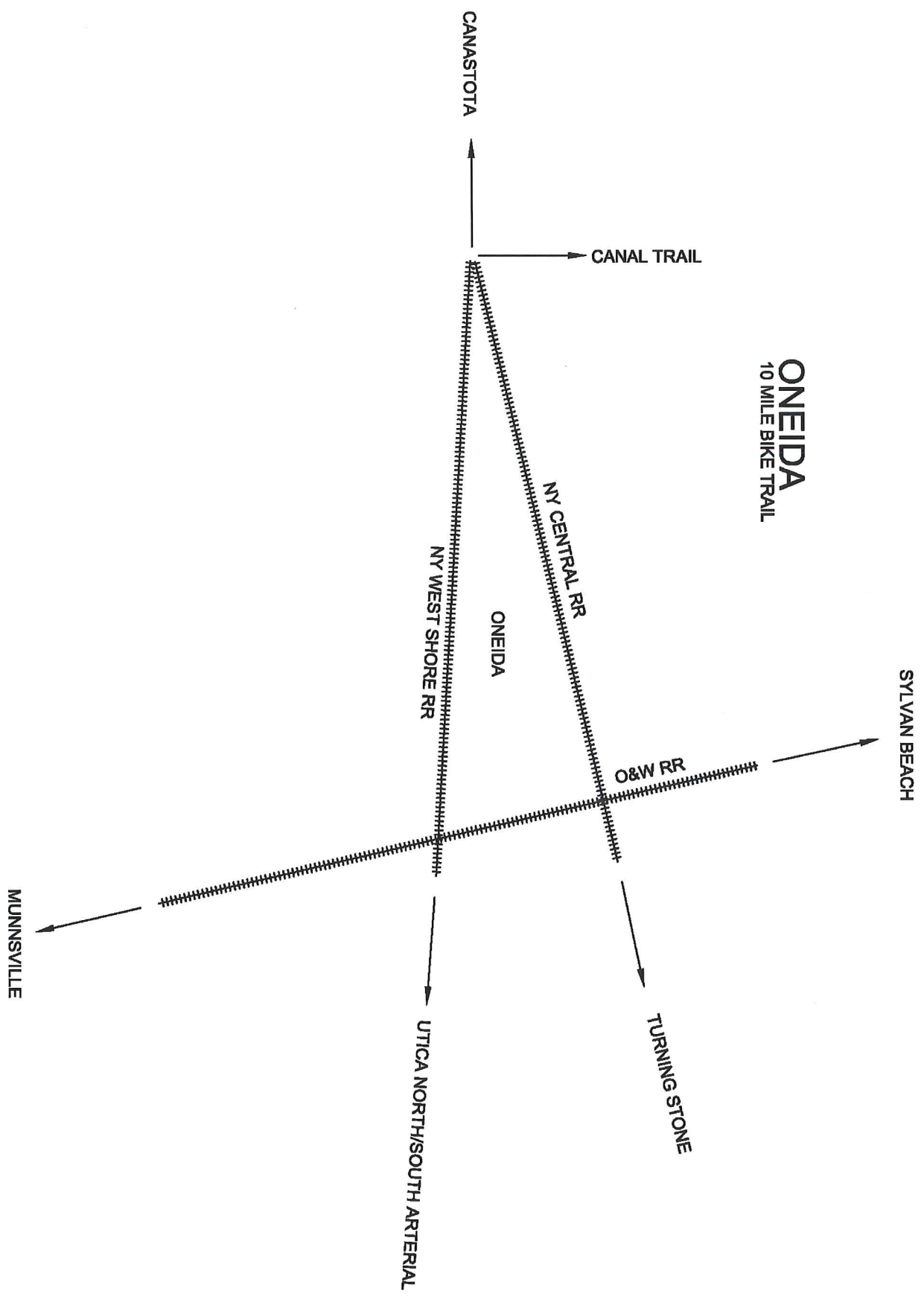
Route 20 Corridor

1. Agriculture and Tourism
2. Empire Brewery (Syracuse)
   New brewery and farmland (Fall 2015)
   Cazenovia, Route 20
   Brewery and three acre farm (Hops, etc.)

Mohawk Valley's Future
Defining the Next 50 Years

Note: Four Season Design, lighting (LEDs), water (future gold)

Industry

- Nano Tech and Biotech
- Spinoff Opportunities
- Health and Medical Opportunities

Transportation

- Highways
  - ✓ Judd Road extension(840) to Griffiss Park (route 825)
  - ✓ Utica Rome Expressway extension past Leland Avenue to Routes 5 and 5S
  - ✓ Route 5 bypass Kirkland to route 840
- Urban transit (self driving urban vehicles)

Defining the Next 50 Years

continued

Transportation cont.

- Air service (passenger and global freight)
- Aircraft maintenance and drone programs
- Pedestrian walkways
- Snowmobile Trail System
- Bike trail system – Connect the existing trails
- Bike lanes on highways
- Railroad high speed service Buffalo: to New York City
- Railroad: complete last 45 miles to link Utica to Lake Placid

Defining the Next 50 Years

continued

Housing

- Loft apartments and neighborhood experience
- New housing/rehabilitation
- Senior/retirement housing
- Waterfront housing
- Vacation/co-op housing
- Energy conservation/alternative energies

Defining the Next 50 Years

continued

Colleges

- Development of new programs
- Expand trade education, internships
- Develop region as a "college town"
- Develop region as a "global village"
- Programs for "hard-core unemployed"

Defining the Next 50 Years

continued

Health

- Health services and research/development
- New Medical Center
- Mental Illness Studies – MV Psychiatric Campus
- Nano Tech/Biotech
- Spinoff opportunities

Defining the Next 50 Years

continued

Quality of Life

- Neighborhood development: examples such as Seattle, Portland, Boston, Austin, Brooklyn, Greenwich Village, SoHo, Tribeca
- Sports and recreation facilities
- New baseball park

Tourism

- Four Season Programs

Agriculture

- Grow and use local produce

Defining the Next 50 Years

continued

Sustainability

- Conduct an Annual Summit to revisit regional economic development progress

Resources

- Vision 20/20 – Oneida County
- Utica Master Plan (Design Studio, Cornell R2G)
- Genesis (Regional Vision) www.thegenesisgroup.org
- EDGE
- Six County Regional Economic Development Council
- Coffee Shop/Utica Club "Summits"
- Entrepreneurship Programs

The End

Thank you to:

DELTA
ENGINEERS, ARCHITECTS, & LAND SURVEYORS

for all their help in the preparation for the presentation.

Creating Jobs In Poverty Neighborhoods

Create Program Modeled After Federal Program in 1978 —

Urban Development Action Grants (UDAG)

1) For Poverty Census Tracts
2) Funded Project must create jobs for People in Poverty in that Census Tract
3) For every $2 of private funds, $1 will be matched by the UDAG program.

In Utica:
1) The Sheraton Hotel (now Radisson) was built with 5.7 M for the hotel. A 2.5 M (approximate) grant was given to construct a parking garage to support the hotel.
2) The Plaza East private funding on Mohawk Street was supported by site improvements and road work on Mohawk, Eagle and South Sts.

Leave No Neighborhood Behind

CornHill

Lower East Utica
   Jay, Catherine, Mary, Elizabeth

Central Genesee

Uptown

Lower West Utica
   Schuyler, Saratoga, Lenox, York
              Wager, Sunset

Highlands

Downtown / Oneida Square

Poverty Initiatives

1. Erie County
   Report : 49 programs
   Mark Poloncarz

2. State targets Rochester to
   address poverty
   (Report unknown)

3. Federal HUD Initiative
   Program / Funding to awarded
   Urban Areas
   a) Cities would be required
   to examine patterns of
   segregation in neighborhoods
   and develop plans to
   address them.
   **b) "Show upward mobility"
   c) HUD - Albany Office - funded
   a <u>trade school</u> in downtown
   Albany (<u>$3 M</u>)

4. Hoboken, N.J. Program after "Sandy Storm" "Rebuild By Design" Developed a <u>Training Center</u> Includes Storm water design, rain barrels, building design, etc.

5. Community Engagement
   a) Address decades of issues
   b) "Boots-on-the-Ground" Police / Codes / Social Services / Health / Fire / Educators — visiting neighborhoods on a <u>daily</u> basis.
   c) Entrepreneurships
   d) Jobs

* 6. Criminal Justice System
     City Court, 1st offenders, Jobs, Training, Education, Mentoring

{ Mike Ballman
  City
  Police   ⟶
  MVCC
  Public Schools

6. Neighborhood Integration with Community

   Develop Activities same as rest of city

   * Linkages — sidewalks
     lighting, banners
     new businesses
     jobs
     rehab houses
     bike paths

7. State of Utah

   Give a House to a Homeless Person

   Rent (Ownership), 30% of income or $50/month

   and a Job

   Public Savings: $8,000/yr vs $13,000/yr for homeless human services

   (NBC Nightly News 6:30 PM)
   (Sunday 5/3/15)

8. Entrepreneurships - Crafts
Use Etsy : selling crafts
on-line

9. James Street / West Utica

(review & Update)

a. Training
Carpentry / Mason
other building trades such
as glass replacement,
stone cutting, etc

b. 2 semesters (15 cr hrs/
semester)

Paid internships ———
Adjuncts : Building
Contractors

Use "Blue Book" to
measure course
content success.

c). Building Contractors
New or Rehab projects
Paid Internships (15 cr hr)
At - risk students

Rt 825 - Rt 840 Connection

Griffiss Business Park

Rt 825

Rt 49 to Utica

Erie Canal

(Proposed Connection)

to 233

Airport Road

Judd Rd to 840
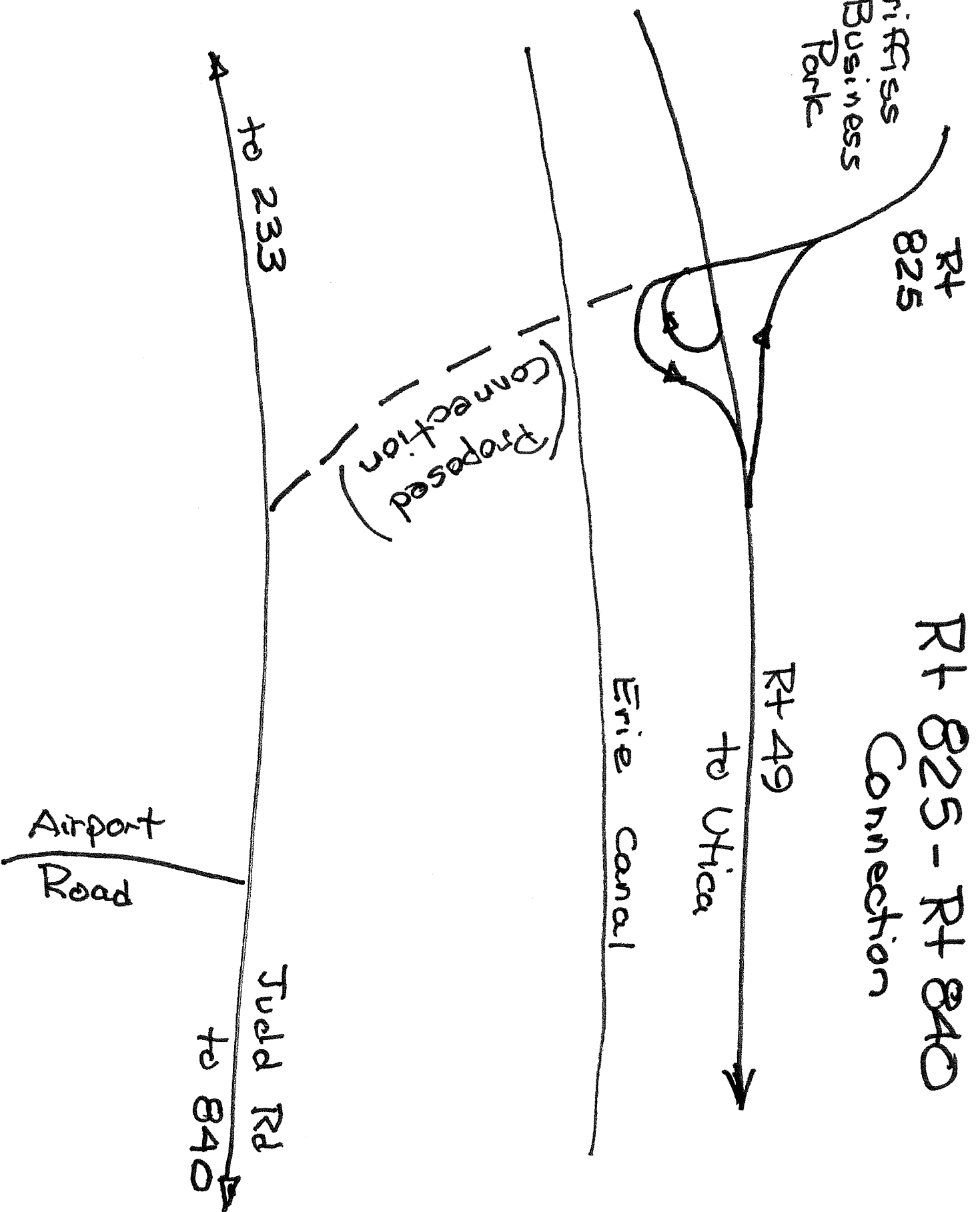
Clinton–
New Hartford
Rt 5 By-Pass

Kirkland

Rt 5

New Route 5

to Clinton

Jay-k

Middle settle Rd

Commecial

Rudd Road

Drive

Rt 840

Rt 49 - Rt 5 S Connection

West Bound

East Bound
Utica-Rome
Expressway

Leland Ave

Herkimer Rd

NNS Thruway
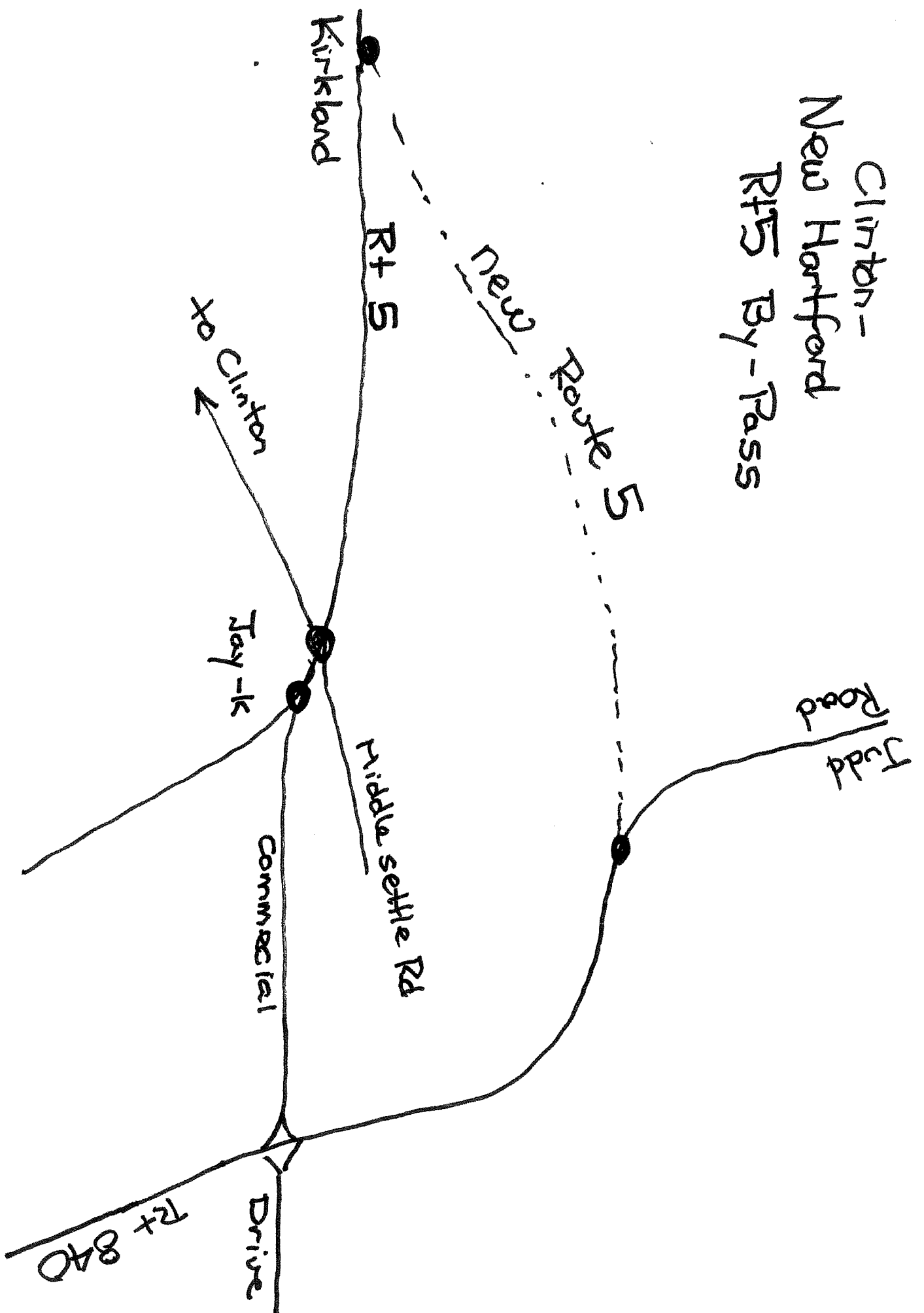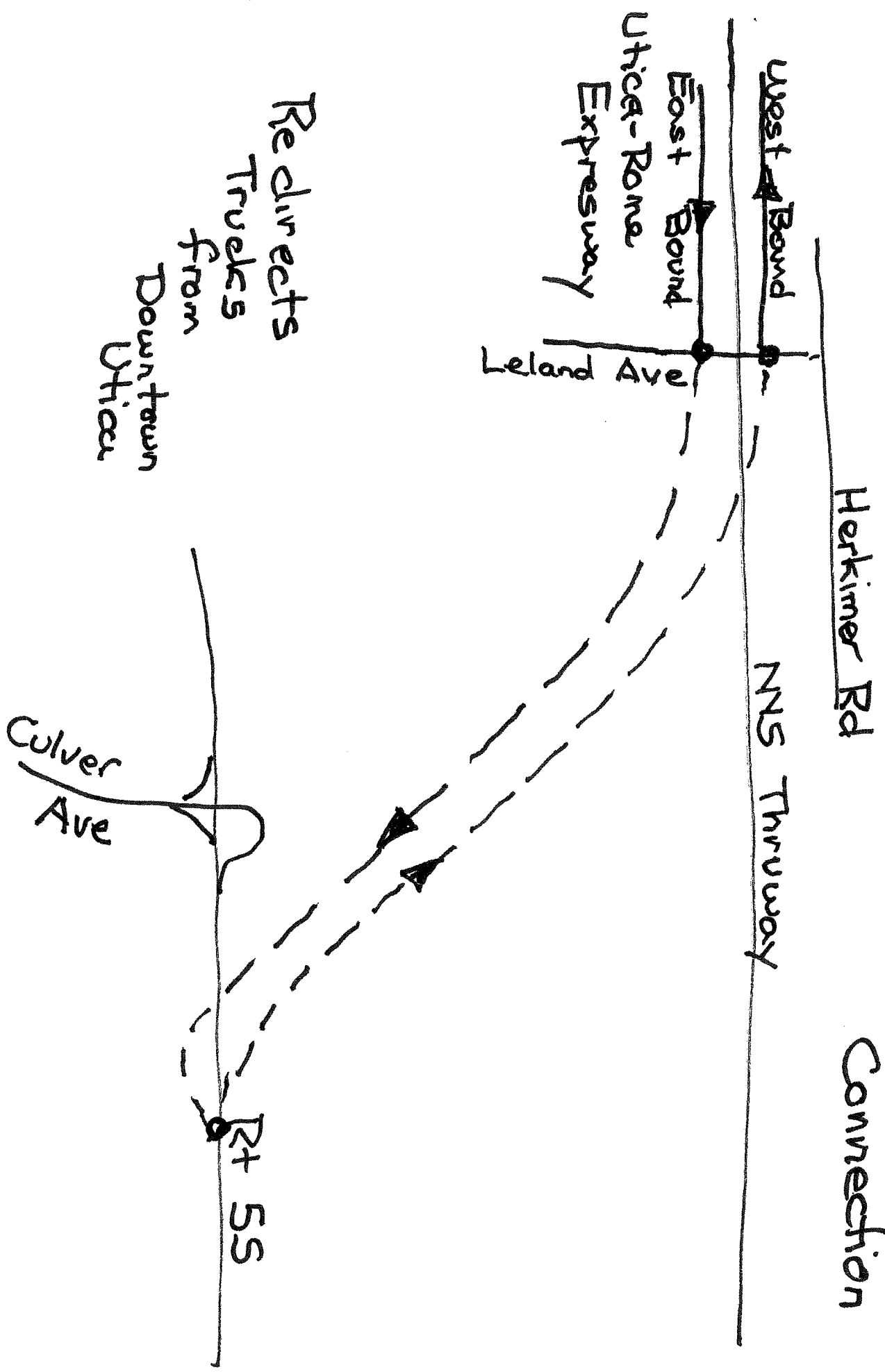
Redirects Trucks from Downtown Utica

Culver Ave

Rt 5 S

New Exit 31

Rt 49
to Rome

Thruway
to Syracuse

East

West

NYS Thruway

On-Off Ramps from
Utica- Rome
to NYS Expressway
Thruway

to
Utica

2 MEDICAL CENTERS and Downtown Linkages
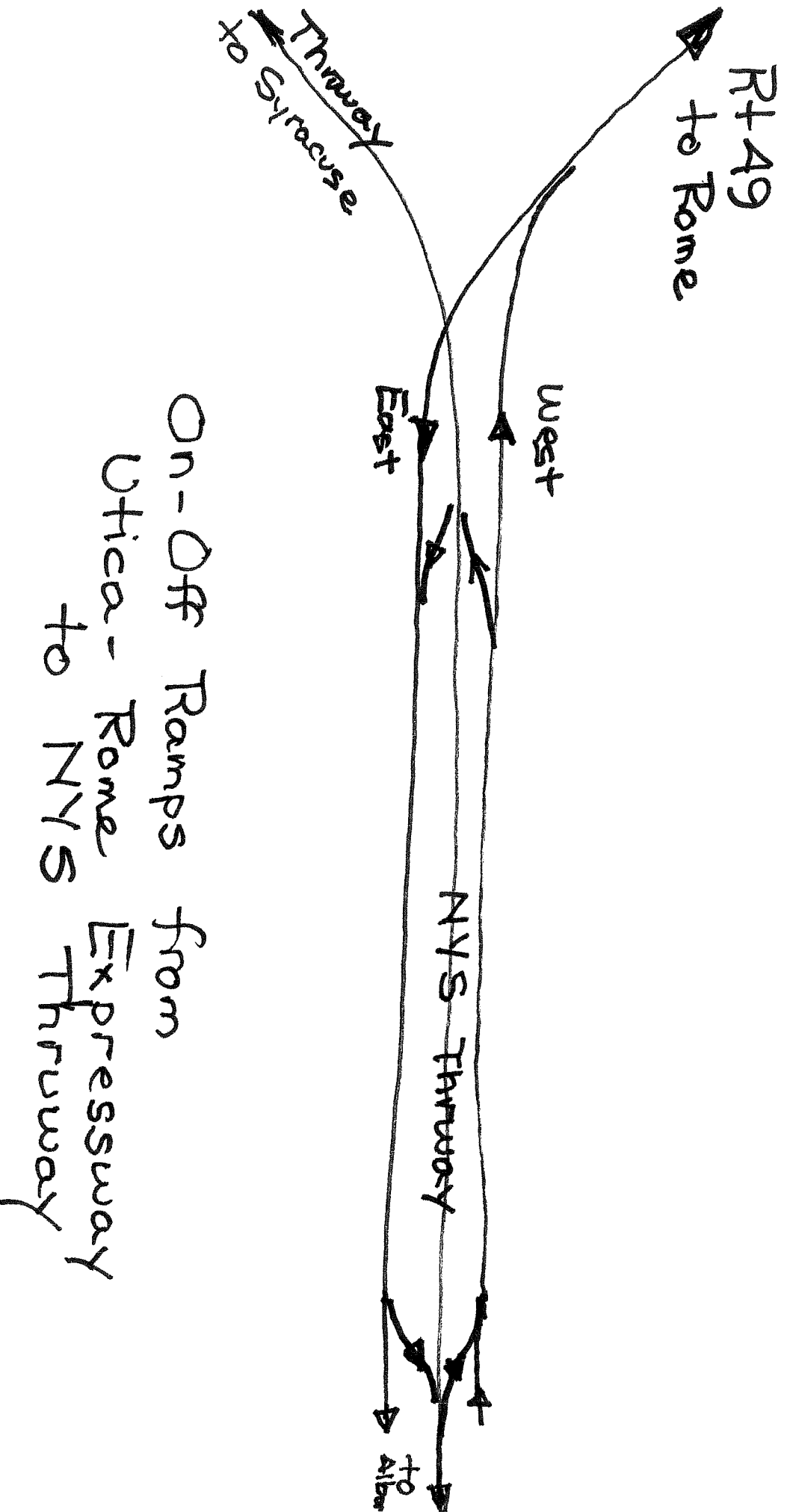
New N-S Arterial Rt 12 N

Utica Harbor

Court St

Utica Psychiatric Center R&D

York St

CSX RR

Criskany Blvd

Oneida Square

Medical Center Medical Offices Parking Garages
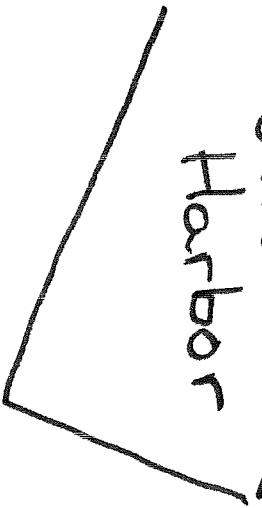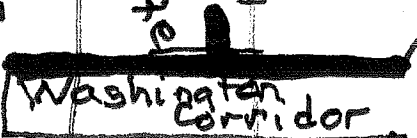
Parking Garage

Washington Corridor

Stadium

Hotel

Elevated Pedestrian Walkway (Genesee St to Harbor)

City Hall

Broadway

Upper Level Parking Garage

Radisson

Genesee St.

Upper Level

Kennedy Garage

Columbia Street

Medical Center

Lafayette Street

Garage

New Parking

Washington Concourse

Blvd

Oriskany Blvd

Aud Addition

Aud

Whitesboro St

New Parking Garage

CSX R.R.

Stadium

Hotel

Harbor Area
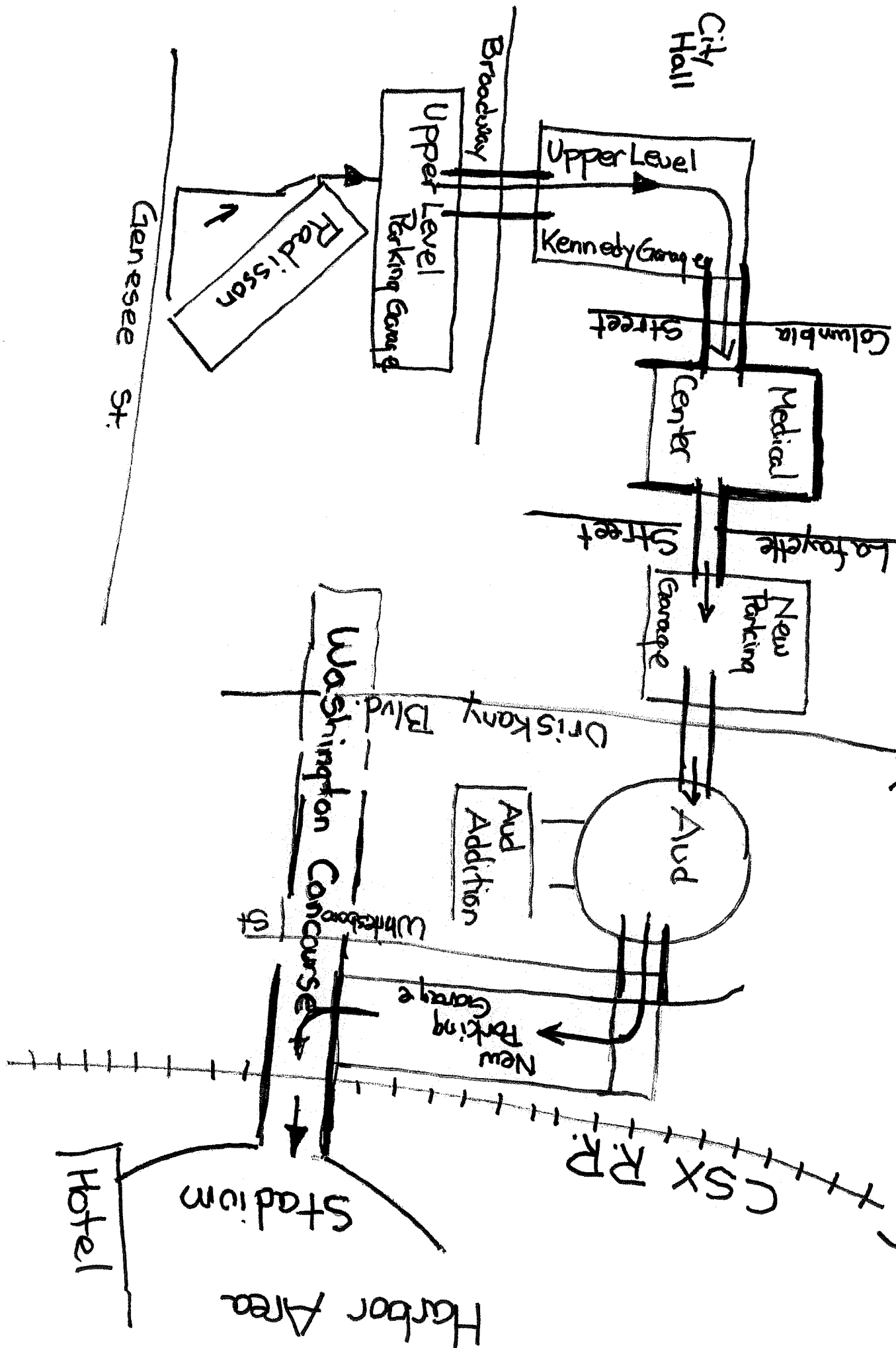
Thoughts

Medical Center Complex

(Design the Health Care System to attract the best Doctors and Specialist to Utica and the Mohawk Valley.)

a. New Medical Center and Neighborhood
    Laboratories
    Medical Center Offices
    Nearby Medical Offices
    Secure Parking
    Outdoors walkability
    Restaurants / Health Exercise Centers
    Professional Clubs (Networking)

b. Utica Psychiatric Center
    Services
    Research and Development

c. New uses of Former Hospitals

d. Sports Medicine and Rehabilitation
    (Colleges and Utica Aud Complex)

e. Colleges and Universities (2, 4, and
    Advance Degress / Teaching

f. NYS Nano technology / Biotech
    Network

Urban Centers
(Consolidation Activities)

Rome
Lee
Western
Floyd
Vienna
Annsville

Oneida
Verona
Vernon
Stockbridge
Smith field
Lincoln
Lenox
Sherrill

Utica
Whitestown
Marcy
Deerfield
Schuyler (H)
Frankfort (H)
New Hartford
Kirkland
Westmoreland

Valley —
Herkimer
Little Falls
Fairfield
Manheim
Danube
Little Falls
German Flatts
Stark
Warren
Columbia
Newport
Norway

Estimated Cost
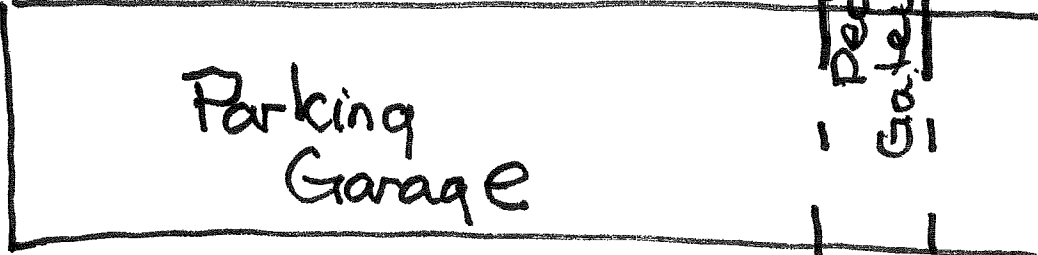
1.	Indoor Rink/ Sports Medicine	5 M
2.	Outdoor Ice	.5 M
3.	Parking Garage For Aud / Harbor	10 M
4.	Washington Concourse	2 M
5.	Pedestrian Gateway Bridge	2 M
6.	Stadium	12 M

Sub Est Total $ 31.5 M

With Neighborhood Improvements 8.5 M

Est Total $ 40 M

Tomorrowland, U.S.A.

A city-by-city look at the people and ideas shaping our urban future.

Illustrations by Hylton Warburton

N E X T

Our collective future lies in cities—that much, at least, seems clear. According to UN estimates, 68% of the world's population will live in metropolitan areas by 2050, and in the U.S., more than 80% of us are already city dwellers. To get a sense of where life is headed, *Fast Company* scouted 20 of the most exciting ideas being implemented in cities around the country, including Louisville, Kentucky's approach to urban agriculture, Denver's aggressive rethinking of its transit system, and Portland, Oregon's emphasis on sustainable design. Taken together, these initiatives paint a picture of tomorrow. What can your hometown do to get there? Read on to find out.

1. Commit to social equality

SEATTLE

This year, Seattle has passed provisions to offer both male and female city employees paid family leave, approved a subsidized bus pass for those making less than double the poverty level, and started prioritizing applicants from distressed areas when hiring for city construction projects. In April, the city's minimum wage went up to $10 an hour, on its way to $15 by 2022.

2. Harness tech to fuel a turnaround

BOSTON

To rejuvenate its decaying Seaport area, Boston committed in 2010 to create a 1,000-acre "innovation district." Now the neighborhood is home to more than 200 companies, and its offices, coworking hubs, and community center have attracted a population of tech workers to rival that around MIT in nearby Cambridge. Public transit improvements are on the way, and last fall, Mayor Martin Walsh formed a committee to help build similar districts elsewhere in the city.

3. Bridge the economic divide

WASHINGTON, D.C.

Washington, D.C.'s Anacostia area—long plagued by poverty and crime—is cut off from the rest of the city by a river and a major freeway. But that's now changing: The once-busy 11th Street Bridge is being transformed into a public park, providing a pedestrian conduit between the neighborhood and Capitol Hill, along with much-needed green space. And while independent groups have tried periodically to clean up the highly polluted Anacostia River, the city finally released a plan last year that would make the river swimmable by 2032.

4. Plan to save water

LOS ANGELES

Los Angeles has been aggressively pursuing new methods of water conservation since well before the current drought crisis. The Department of Water and Power is working on an ambitious plan to purify recycled wastewater and pump it underground, refreshing the groundwater supply at a rate of more than 4 billion gallons per year by 2022. Mayor Eric Garcetti has also called on citizens to help conserve. **"All of us need to reduce our water usage by 20%,"** Garcetti says. **"It's pretty easy to do—much easier than you'd think."** In April he released a plan to cut water imports by an ambitious 50% over the next 10 years.

5. Create a food oasis

LOUISVILLE, KENTUCKY

The USDA has branded the west side of Louisville, Kentucky, a "food desert." Next year, Seed Capital Kentucky, a not-for-profit focused on supporting regional agriculture, will change that, breaking ground on a $20 million, 24-acre facility called the FoodPort. Here's what will happen inside:

WHOLESALING

The facility's proximity to Interstate 264 makes it a prime distribution venue. Local farmers will drop off crops, which will be packaged and sent out to restaurants and other buyers. A farmers' market will sell fruits and veggies grown on site.

INNOVATION

Local food startups will be among the anchor tenants of the FoodPort's commercial spaces, and there will also be room for fledgling entrepreneurs to test out their products. Advisers on staff will be available to help them build their ideas into businesses.

RECYCLING

Edible leftovers from the vendors will go to local food charities. Everything else will be run through an anaerobic digester that turns organic material into fertilizer and clean, renewable natural gas, which will then be pumped into the public gas supply.

Portrait illustrations by Elsa Jenna

6. Build urban green zones

ORTLAND, OREGON

n 2010, Portland, Oregon, launched a plan o turn five neighborhoods into "EcoDisricts" where emissions, energy use, and vaste will one day approach net zero. The outh Waterfront, a former industrial zone, vas chosen as a pilot; five years in, it's full f promising projects, such as:

WILDLIFE RESTORATION

A 100-foot-wide greenway running alongside the Willamette River includes a refuge for young salmon and provides a nesting ground for migratory birds, including the osprey that have made the South Waterfront their home.
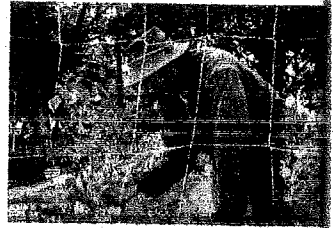
SOLAR ENERGY

A 6,000-square-foot wall, which spans two floors of the Oregon Health & Science University Center for Health & Healing, is covered with sunshades that double as photovoltaic panels, preventing the release of 97 metric tons of CO_2 each year.

EFFICIENT TRANSPORTATION

An aerial tram takes commuters to and from the waterfront, and the 1,720-foot-long Tilikum Crossing, America's longest carless bridge, carries light-rail trains, buses, bicyclists, and pedestrians to the rest of the city.

7. Change he face of local government

ITTSBURGH

Vhen Bill Peduto became 'ittsburgh's mayor in 014, one priority was to nake his administration s diverse as possible. He artnered with the Pittsurgh Foundation and the Iniversity of Pittsburgh's nstitute of Politics to aunch Talent City, a platorm for recruiting and valuating candidates for ity positions from far utside the typical talent ool. Of the 45 people ired via Talent City—who nclude police chief Camron McLay—55% are vomen, and more than quarter are black. **"We ieeded a much better ystem [for hiring] than he old political-machine ystem of bringing in he staff of the camaign and friends and iolitical donors,"** Peduto old *Fast Company* earlier his year.
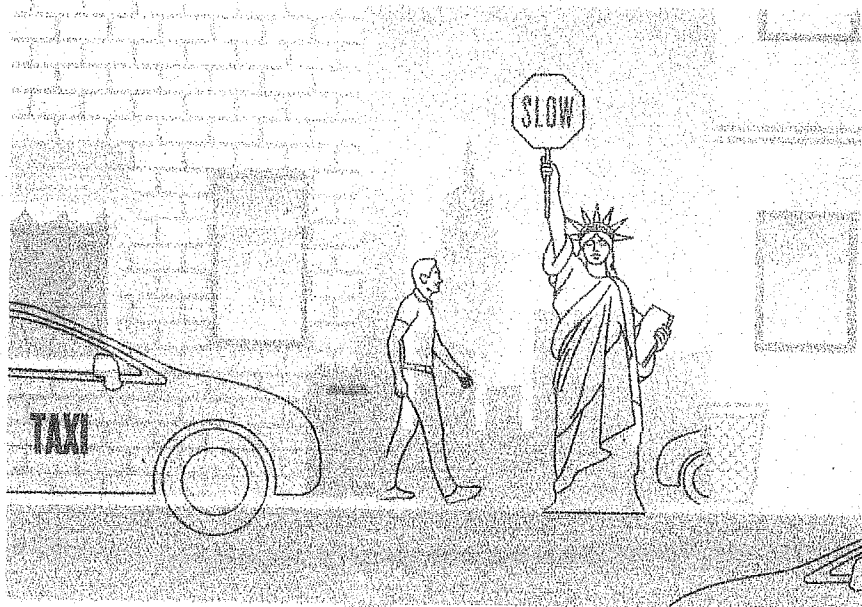
8. Make people a priority

NEW YORK

High-tech skyscrapers are rising all over town, but New York's most notable progress is far less conspicuous. An initiative to reduce traffic deaths—which involves redesigned intersections, PSAs, and a reduction of the citywide speed limit to 25 mph—brought down pedestrian fatalities to a record low of 138 in 2014. There's also a plan to turn 7,000 obsolete pay phones into public Wi-Fi kiosks. And last spring, Mayor Bill de Blasio announced the Tech Talent Pipeline, a program to connect students at the City University of New York with jobs in Silicon Alley.

9. Grow new business

OAKLAND, CALIFORNIA

The Brooklyn to San Francisco's Manhattan has become a hub for green businesses like Sungevity, one of the top solar providers in the country, and Lucid, whose energy-monitoring software has been used by the likes of Disney and Google. Tech startups are popping up as well, lured by low rents and abundant space. The city has recently taken steps to make itself more livable, including a zoning change to make it easier to turn vacant lots into urban farms.

# 10. Cultivate young talent

CINCINNATI

The Cincinnati Center City Development Corporation has built 347 condos, 176 rental units, almost 375,000 square feet of commercial space, and a new public park in its depressed Over-the-Rhine area since 2004. To help young people prepare for their careers, Cincinnati Public Schools has created partnerships like the Business Education Connectivity Council, which will run a mentorship program for high schoolers beginning this fall.

Lori Eanes (Oakland)

11. Get transit on the right track

DENVER

enver is in the midst of a major transit expansion, which will give the city one of the most advanced networks in the country. The changes are the result of a referendum passed in 2004 to fund the creation of 122 miles of new and expanded rail lines, as well as a renovation of Denver's historic Union Station and a rapid-transit bus system called the Flatiron Flyer to provide quick and easy transit to nearby Boulder. **"The transformative power of transit is undeniable,"** says Mayor Michael Hancock. The city is also coordinating with developers to build in areas that will be served by the expanded system, with more than 2,400 housing units and 1 million square feet of retail space built so far. By 2018, travel times to downtown are projected to have decreased by as much as 38%.
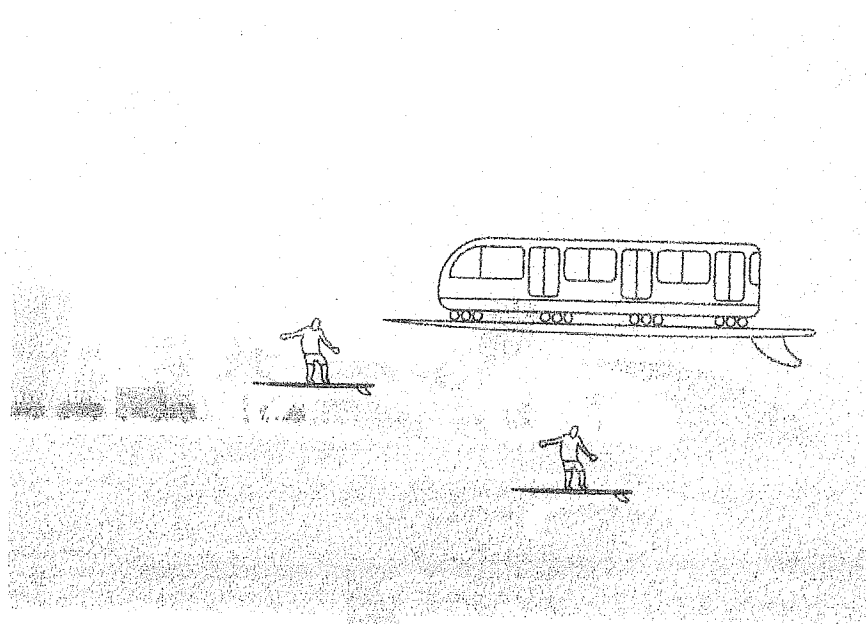
12. Solve traffic congestion

HONOLULU

Honolulu has the worst traffic in the U.S., ahead of even Los Angeles. So in 2011, the Federal Transit Administration approved an eight-year, $5.2 billion plan for a 20-mile elevated rail line that, when it's completed, will be America's first entirely driverless transit system. The train will provide a link between downtown Honolulu and the suburb of Kapolei, passing through four university campuses, the airport, and Aloha Stadium, a big concert and sports venue. Expected to be both safer and more efficient than conventional trains, it is projected to eliminate 40,000 car trips per day.

13. Make old buildings new

BUFFALO

An influx of young college graduates, lured by cheap real estate and Rust Belt charm, have revitalized many of Buffalo's industrial relics. Buffalo RiverWorks, for example, is a former grain elevator that's been transformed into a 60,000-plus-square-foot recreation center with two ice rinks, a 6,000-seat theater, three bars, and a restaurant. A new plant for renewable-energy company SolarCity, being built on the site of a former steel manufacturer, will add much-needed jobs when it opens in 2016.

15. Bet big on infrastructure

LAS VEGAS

One of greater Las Vegas's busiest streets, Flamingo Road, is getting a $40.3 million overhaul that will include new bus stops, better crosswalks, and more traffic signals. Last year, the regional transportation commission began studying how to expand public transit on the Strip, and in March, officials vowed to put more than $90 million toward improving pedestrian safety.

14. Crowdsource urban renewal

DETROIT

Detroit is home to nearly 80,000 derelict and vulnerable structures, and the Detroit Blight Removal Task Force has been created to eliminate them. Convened after the city declared bankruptcy in 2013, the group is leveraging technology—and the power of engaged citizens—to get the job done.

BUILD A MAP
Two local tech companies built a database of every property in the city, combining existing data sets with material gleaned from a citywide survey to create a repository for information on nearly 375,000 properties.

GET FEEDBACK
Citizens help update and refine the database via the Motor City Mapping app. Users snap a photo of a blighted property, record the building's location, and upload the data. A quality-control team reviews the information before adding it to the database.

TARGET SMARTLY
The task force now uses the info to identify cleanup projects that will affect the greatest number of people and help the city prioritize its demolition efforts. Since early last year, the city has demolished more than 4,000 blighted structures.

16. House the homeless

SALT LAKE CITY

Utah's chronically homeless population fell by 34% from 2010 to 2014 (compared to 21% in the U.S. overall), with the majority of that progress centered in Salt Lake City. Here's what the city has offered to improve what has seemed to be an intractable situation.

HOUSING

Most cities prioritize temporary shelters over long-term housing. Salt Lake City has adopted a different strategy, placing chronically homeless people in one of 950 federally subsidized apartments, for which they pay a nominal rent of, at most, 30% of their income per month.

HELP

Caseworkers meet with residents of the apartments, helping address underlying problems by referring them to medical care, psychiatric counseling, financial planning, and other services.

WORK

The state helps the now formerly homeless find employment, even if it's a job that offers only a few hours of work per month. The approach leads to better results for the homeless, and saves Utah money on emergency services, as well.

17. Invest in the future

HOUSTON

Since the Great Recession, Houston has added jobs faster than any other large American city, and it saw its population of young college graduates grow more quickly between 2000 and 2012 than any other major metropolis. That abundance has led to projects aimed at making the city even more vibrant, including a $242 million proposal to convert the unused Astrodome into an indoor park and a $450 million expansion of the Museum of Fine Arts into a cultural campus designed by architect Steven Holl. **"We're trying to build a city that is innovative, exciting, entrepreneurial, and sustainable,"** says Mayor Annise Parker. Under Parker, Houston, long a bastion of the oil and gas industry, has also become a green leader, getting 50% of its energy from renewable sources.

18. Detect trouble through data

CHICAGO

In 2013, Chicago won a grant from Bloomberg Philanthropies to develop data-driven tools for cities. Its first product is WindyGrid, a dashboard for public-safety information for city personnel, including 911 calls and tweets about potholes. The city also now uses 311 data to predict and address problems before they occur. It also partnered with Code for America to develop a 311 tracker, through which citizens can check on their service requests. Work is ongoing on a "Data Dictionary" portal, designed to make the city's public information easily searchable.

19. Connect more quickly

CHATTANOOGA, TENNESSEE

Built in 2009 with the help of a $111 million federal grant, Chattanooga's gigabyte-per-second, mega-high-speed Internet network has been a major driver of local startup activity—and its effects are poised to spread to the entire region. In February, the FCC approved the Chattanooga Electric Power Board's petition to sell superfast Internet service to surrounding towns.

20. Revive dead spaces

ORLANDO, FLORIDA

Once a shopping mall, Orlando's Church Street Exchange had been a vacant eyesore for over a decade. In 2014, developers converted its central plaza into office, coworking, and event spaces for 80 fledgling tech companies. Now business tenants can commute there via the city's newly opened rail system, which has a station just one block away.

CONTRIBUTORS: RYAN BRADLEY, SHAUNACY FERRO, REBECCA GREENFIELD, CORINNE IOZZIO, HANNA BROOKS OLSEN, NIKITA RICHARDSON, LAUREN SCHWARTZBERG, MIRIAM TAYLOR

Richard Cummins/Robert Harding World Imagery/Corbis (Chattanooga)

Endangered Building Program

Utica
Former Knights of Columbus
Former Catholic Women's Club
Former New Century Club
Building (Genesee & Jewett Sts)
Wetmore School
Buildings / Site   Utica Psychiatric
                              Center

Former GE Plant - Bleecker St.
City Owned Properties

Deerfield
Broad Acres - Walker Road

Etc.

Regional Technology Incentives

Partners:
- SUNY Poly
- MVCC
- Cornell - R2G / Engineers
- High Schools / BOCES
- Local governments

Programs
- Introduce new technologies into the region
- Regional "test sites" for new technologies

Technologies
- Nanotechnology
- Transportation - Google - Self-driving vehicles (Harbor, Baga's Square, Griffiss)
- Renewable Energies
- Health / Rehabs
- Products and Services

Imagine

densely packed cities and suburbs thick with Google-developed, fully automated cars zipping silently alongside more conventional vehicles that become driverless at the touch of a button. They all navigate safely around pedestrians, pets, and bicyclists, while buses and trains avoid cars and one another thanks in part to a vehicle-to-vehicle communications network. Out on the highways, vehicles with varying levels of autonomous capability mix with older, owner-operated cars and trucks, except when lanes dedicated to autonomous-only vehicles open up.

To some, these blue-sky scenarios might seem a long way off, but Google thinks this way right now. It's working on its own part of the equation with such
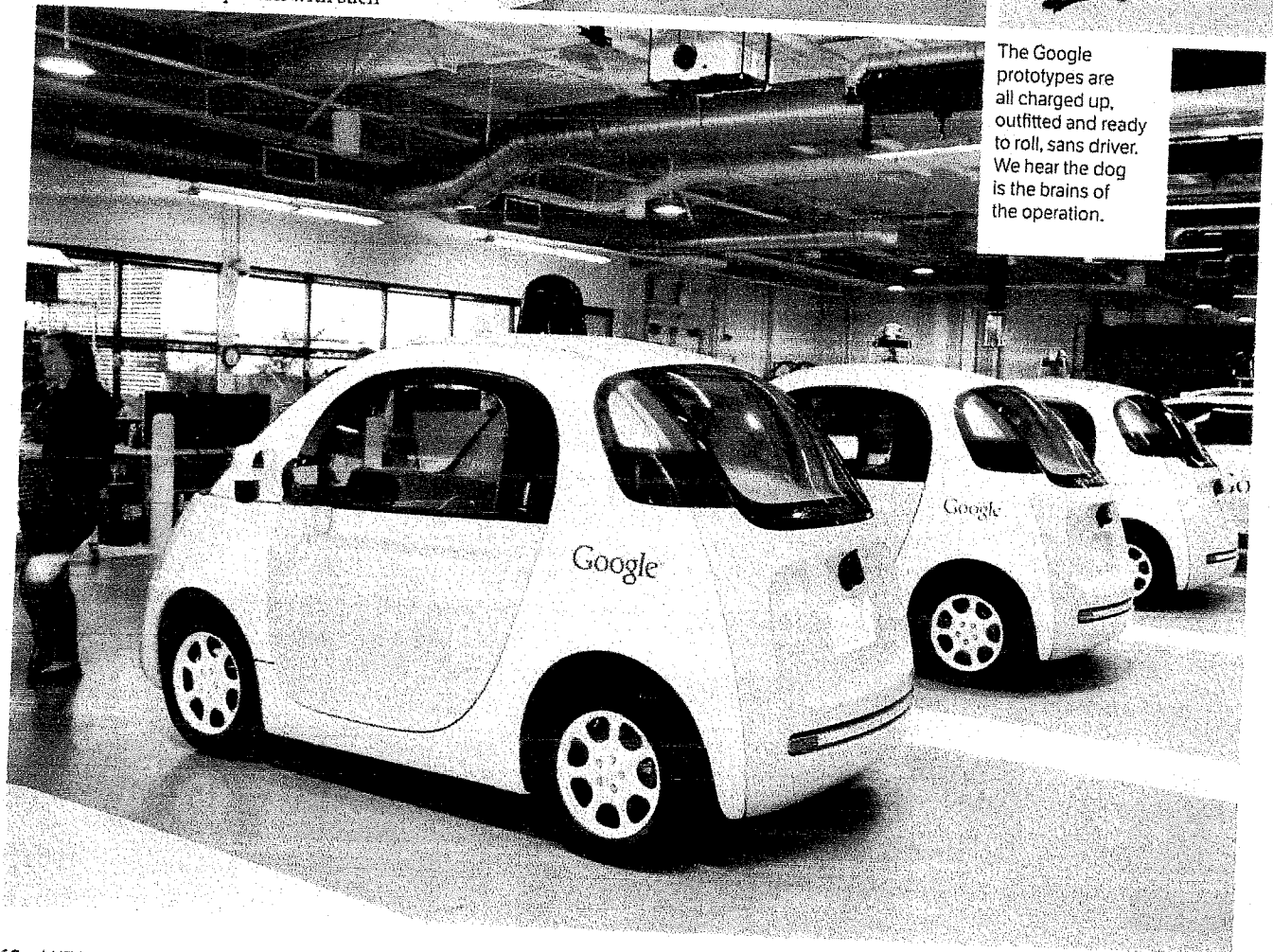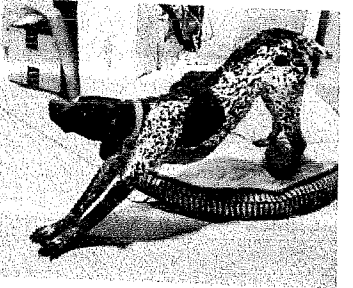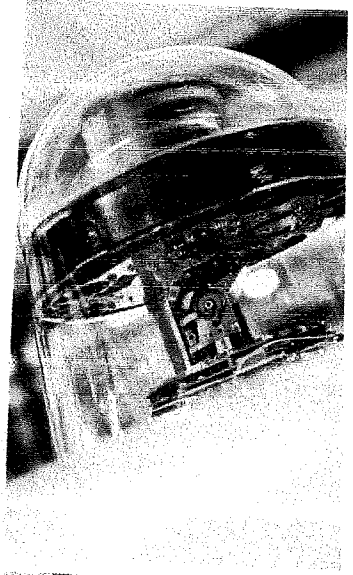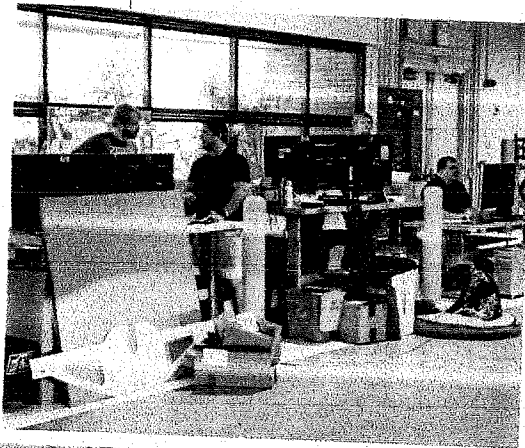
The Google prototypes are all charged up, outfitted and ready to roll, sans driver. We hear the dog is the brains of the operation.
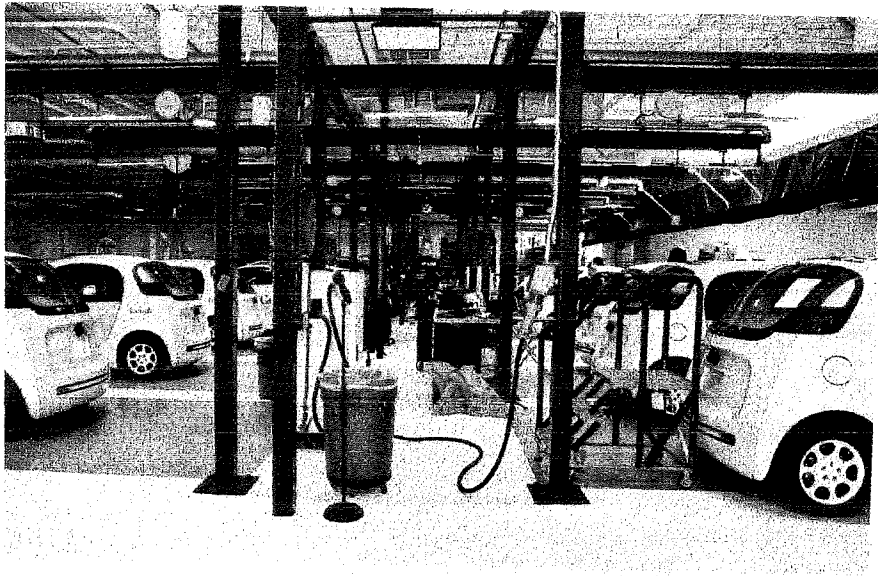
ferocity that having its electric-powered cars sans steering wheels and pedals on the road in droves any later than 2030 is considered dour pessimism by anyone inside the gates of the tech giant's Googleplex in Mountain View, California.

Rather than neat, Orwellian rows of identical autonomous cars in a constant, regulated flow, Google envisions a motorized mishmash not terribly different than today's traffic, though it would be safer, cleaner, and more efficient. The company is concentrating the bulk of its efforts on solutions for urban and suburban environments, with robotaxis and Uber cars (Google is Uber's biggest investor) joining the conventional traffic mix by the middle of the next decade. Mainstream automakers have thus far focused their efforts on step-by-step buildups of the adaptive cruise control and lane departure control, building blocks necessary to bring automation to the nation's highway system. Everyone is baking in redundant systems—elaborate sets of sensors, cameras, and mapping technology—designed to check and recheck one other with the promise of dramatically minimizing unavoidable impacts.

Crashes will happen, but Google management does not seem terribly concerned about the question of who is ultimately responsible when the first major crashes involving driverless cars take place. (Google's autonomous vehicles have been involved in 11 minor fender-benders since testing started in 2009 in California, although Google claims its cars and drivers were not at fault in any case.)

"Systems fail. We're doing everything we can to make this safe. It's going to reduce crashes, reduce injuries, but it's going to be mixing with fallible human traffic, fallible human drivers. It's going to have defects," explains Google's driverless car program chief Chris Urmson. "Hopefully, they will be far fewer than the rate of accidents, the rate of injuries that we're seeing on the road today. The good news is that the U.S. legal system is really robust, and this question of who's really liable is going to get sorted out."

Google's conventional Lexus RX crossovers and Toyota Prius sedans, the ones with the ungainly aftermarket rack-and-cone setup on their roofs, continue to roam Northern California— Google says its vehicles have traveled

CHRIS URMSON

"SYSTEMS FAIL. WE'RE DOING EVERYTHING WE CAN TO MAKE THIS SAFE. ... IT'S GOING TO BE MIXING WITH FALLIBLE HUMAN TRAFFIC, FALLIBLE HUMAN DRIVERS. IT'S GOING TO HAVE DEFECTS."

FUTURE PAST: AUTONOMOUS ADVANCES THROUGH THE YEARS

1939: A scale model diorama of Norman Bel Geddes' vision for an automated highway system highlights the Futurama ride in the General Motors pavilion at the New York World's Fair.

1958: Chrysler offers Auto-Pilot, the first production cruise-control system, based on mechanically manipulating the throttle linkage.

1958: GM and RCA experiment with automated cars, using wire buried in pavement and magnetic pickup coils in cars. A Chevrolet Impala serves as the test car. GM later uses this technology in its Firebird III and experiments with radar in the Cadillac Cyclone dream car.

1973: Autonomous cars in Woody Allen's sci-fi comedy "Sleeper," set in 2173, presage the 2015 Mercedes-Benz F 015 Luxury in Motion concept.

1977: Tsukuba Mechanical Engineering Laboratory tests a car that can follow roads for about 55 yards at speeds up to 18 mph.
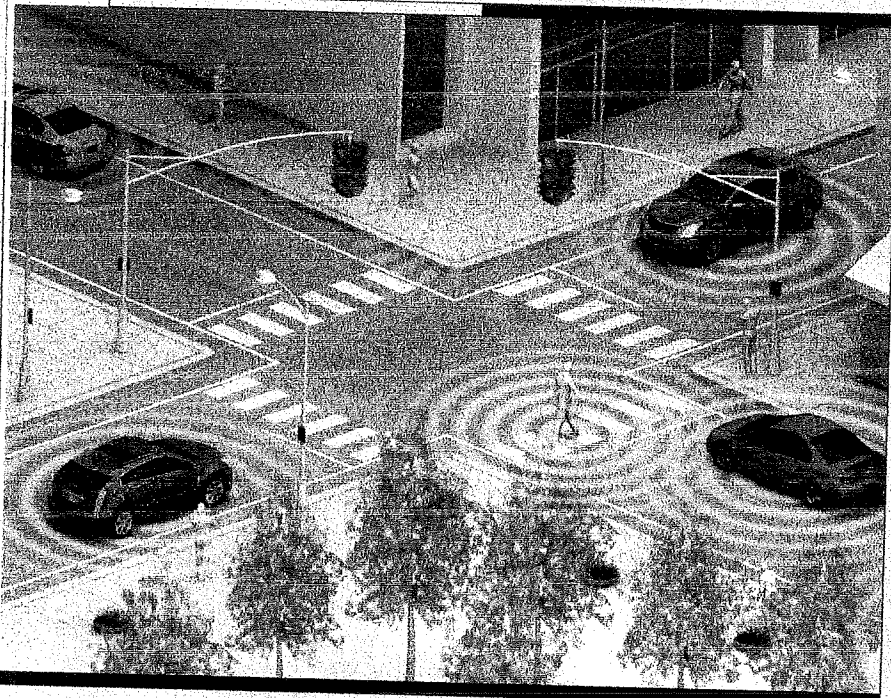
HERE I AM: VEHICLE-TO-VEHICLE CHATTER INCREASING

Automakers are slowly beginning to roll out vehicle-to-vehicle (V2V) communications systems, which could potentially become a big part of the suite of safety technologies for semi- and fully automated driving. Cadillac, for example, has announced it will offer a V2V package as an option for its 2017 CTS.

V2V technology is designed to allow any connected vehicles within a certain area to talk with one another anonymously through the use of a basic application known as a "Here I Am" message that can be communicated via devices such as GPS. By monitoring each vehicle's position, speed, and location relative to the others, connected vehicles would then be able to calculate risk from a 360-degree perspective, allowing for pre-emptive action in the form of a warning alert when the system determines a crash is imminent, for example.

"The car in the front has a camera. You can see in front of it, and then that image can be transmitted to a car that's a hundred cars behind," says Frank Paluch, Honda R&D Americas president. "If we can get every car talking to each other and use that information, that sure would transform our mobility, our society."

One of the more interesting aspects of V2V tech is the potential for aftermarket solutions that could allow for quicker adoption among older cars, which is a core issue. That would come with a dollar sign attached, which the National Transportation Highway Safety Administration estimates at roughly $350 a vehicle by 2020. Despite the obstacles, the feds are high on the concept and have been studying it for more than a decade.

Google? Not so much. It says it isn't in any hurry to incorporate V2V. "It's going to be 50 years until the last pickup truck [without V2V] is off the road," says Google software engineer Nathaniel Fairfield.
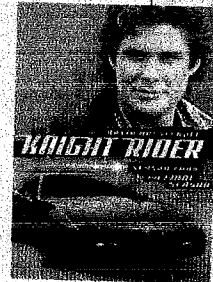
1980s: Professor Ernst Dickmanns, an expert on artificial intelligence from the University Bundeswehr Munich, tests a "robot car" and joins the $1 billion pan-European 1987-'95 Program for European Traffic with Highest Efficiency and Unprecedented Safety (PROMETHEUS).

1982: An autonomous Pontiac Trans Am known as KITT—short for Knight Industries Two Thousand—is the major (only?) reason to watch the "Knight Rider" television series.

1994: Dickmanns demonstrates a robotic Mercedes-Benz 500 SEL with humans in the front passenger seats for more than 620 miles on Paris multi-lane highways at speeds of up to 80 mph. The next year, his robotic Benz makes a Munich-to-Denmark round-trip, driving up to 90 minutes at a time without human intervention, at speeds up to 112 mph.

1995: A Carnegie Mellon University robotics team drives a self-steering 1990 Pontiac Trans Sport minivan dubbed Navlab 5 from Pittsburgh to Los Angeles, where Jay Leno declares himself unimpressed.

1996: A Lancia Thema, developed at Italy's University of Parma, follows highway markings while covering nearly 1,250 miles in Italy, with 94 percent of the trip driven in autonomous mode.
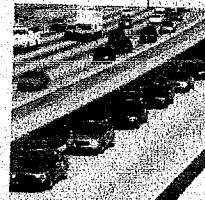
1997: The federally sponsored Automated Highway System is demonstrated on I-15 in San Diego with a fleet of eight Buick LeSabres platooning via vehicle-to-vehicle communications. Additional tests feature automated Pontiac Bonnevilles, an Oldsmobile Silhouette, and full-size New Flyer city buses.

2001: The newly passed Defense Authorization Act declares that one-third of all American military ground vehicles shall be unmanned by 2015.

Google has just received the go-ahead to run its prototypes on the public streets of Mountain View, but only with a driver, wheel, and pedals—for now.
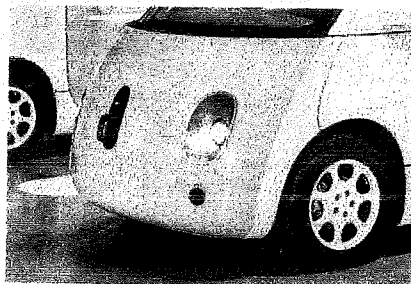
the equivalent of some 1.7 million miles, 1 million of them in driverless mode—while the company awaits a ruling from the California Department of Motor Vehicles that would allow it to test its new prototypes without driver controls on public roads. Google expected the DMV ruling by the beginning of this year, but governments do not move with the same alacrity as Silicon Valley. Whenever the ruling comes down, Urmson says, Google will be ready.

Florida, Nevada, Michigan, and Washington, D.C., have joined California in implementing laws allowing testing of automated cars on their roads in some form, but getting the 46 remaining states in line might become a near-term stumbling block, especially when it comes to cars without redundant controls. Richard Wallace, director of the Center for Automotive Research's (CAR) Transportation Systems Analysis group, fears states will not all join in with similar laws. "[The National

Highway Traffic Safety Administration] can bring a strong carrot or stick, tying in federal funding, but ultimately it falls to the states to decide." he says.

Whenever California finally clears the driverless prototypes for use, they will be classified as neighborhood electric vehicles with a maximum loaded weight of less than 3,000 pounds. (Think glorified golf cart.) Google's prototypes—not its Lexus and Toyota test cars but vehicles built by Michigan's Roush Industries—employ a carbon-fiber body and an electric motor of unspecified output, mounted low in the back and driving the rear wheels, says Jaime Waydo, vehicle development lead engineer. Top speed is 25 mph, and the battery pack is rated for a range of 75 miles. Sensors include a laser in the siren-look device on the roof, a camera in the puppy-dog nose, and a laser under the front fascia. The top laser "can track a car up to two football fields away," Waydo says.

Its rounded body lines make it easier for the sensors to read a 360-degree image of the car. Inside, a narrow, horizontal screen at the cowl displays the camera's view to passengers, and a large, open compartment for groceries and backpacks is between the cowl and the passenger footwell. So when will it be ready for general consumption?

"I always answer, 'We're never going to put it out there until it's safe enough.' But the cute answer I give is I've got an 11-year-old son. He's going to be 16 in five years," and Urmson wants him to continue being a passenger instead of getting a driver's license.

Waydo is more conservative. "Thankfully, my son's only 5," she says.

Google won't let us roll in a proto-type, but we do get a ride in the back seat of a Lexus RX 400h. Program manager Brian Torcellini hits a button on the steering wheel, and the car does all the work, following a Google map around greater Mountain View. It obeys

WHO WILL BE GOOGLE'S AUTOMOTIVE PARTNER?

Google says it has no plans to jump into the automaking business. Instead it wants to team up with a manufacturer that will help it mass-produce autonomous vehicles based on its prototypes built by Michigan-based Roush Industries. Initially, the cars are envisioned as urban/suburban taxis, Uber cars, and "last-mile" cars that connect bus and metro passengers with their homes and offices.

We expect production models to be electric-powered, like the prototypes.

The Internet giant says only those at the very highest levels of the executive flow chart are in discussion with a potential partner or partners, and they're not talking. That does not stop us from speculating on which companies are the best prospects for such a plum deal. They're listed from most to least likely:

TOYOTA

The conventional cars Google has so far converted for autonomy testing have been the Prius and a smattering of Lexus models. Since Toyota likely has already worked with Google and it has chops as the world's biggest automaker, it's the leader in the clubhouse. Scion aG anyone?

DAIMLER

Mercedes-Benz's parent is another leader in automated vehicle development. Its new Smart Forfour seems the right size, and it is rear-wheel drive like the current Google prototype.
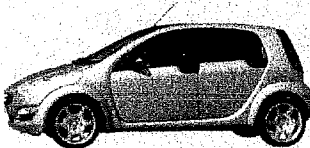
NISSAN/RENAULT

CEO Carlos Ghosn says traffic jam pilot, which "allows the car to drive autonomously and safely in heavy, stop-and-go traffic," will be available on several Nissan and Renault models by 2020, and the electric Leaf could make an ideal platform and package.

GENERAL MOTORS

Before he joined Google, Chris Urmson led Carnegie Mellon University's DARPA effort in a collaboration with GM, and together they won the 2007 DARPA Grand Challenge with a Chevrolet Tahoe. GM could amortize development of the 2017 Chevy Bolt with a Google car using the Bolt's platform and electric powertrain.

FIAT CHRYSLER AUTOMOBILES

FCA CEO Sergio Marchionne is looking to hook up with a partner, and if no mainstream automakers bite, he is open to a deal with a nontraditional partner such as Google or Apple. Fiat does have a 500 EV that kind of, sort of looks like the Google prototype.

TESLA

A new biography of CEO Elon Musk says he nearly sold Tesla to Google in early 2013 as the auto company faced bankruptcy. More recently, Musk said Tesla has autonomy "solved," but it is at the bottom of our list because what Google needs most is a partner with economies of scale and deep manufacturing know-how.
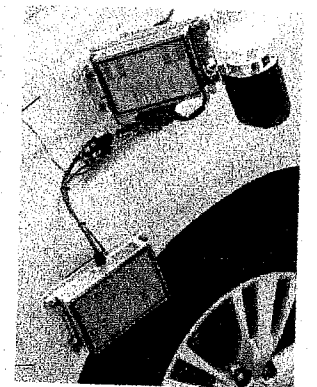
The author, above, gets an earful about how Google gathers the data to help its algorithms learn and the tech it uses to run its cars, driverless style.
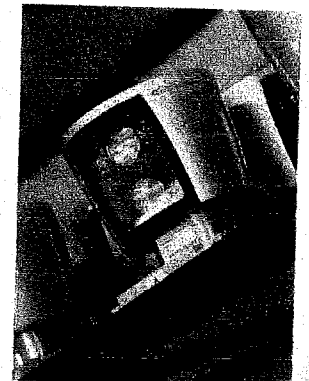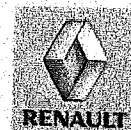
speed limits and traffic laws, and occasionally a female navigation voice warns of a "crosswalk ahead" and the like. On freeways, Google lets the car exceed speed limits enough to keep up with traffic. The Lexus is smooth and efficient—until a bicyclist or another car veers into its path. That's when it slams the brakes, hard.

"The car is making checks all the time" and maintaining a safety cushion, software engineer Nathaniel Fairfield explains. "We ask, 'Why are you slowing down?' And there's a reason for it.

"We were testing [an autonomous Lexus] in Mountain View, and there was this woman in a powered wheelchair, with a broom, chasing a duck in a figure eight in the road," he says. "We can take that data, and add that to the repertoire of situations that the vehicle has to test against and make sure we're safe with women in power wheelchairs chasing ducks in roads."

So grandmas chasing ducks around in figure eights are covered, but what about the costs to consumers for all this cutting-edge technology? New technologies tend to come down in price when they're mass-produced

and there is competition. Proponents point to the same red herrings that were also trotted out before antilock brakes, electronic stability control, and external cameras became ubiquitous.

Take lidar, for example. The laser-based radar systems are a critical part of most of today's autonomous suite of technologies. "The lidar used on the 2007 DARPA Challenge-winning GM vehicle, made by Velodyne, was a $75,000 piece of equipment," CAR's Wallace explains. "They've got one akin to that now that's $40,000 and a smaller one that's $10,000. Meanwhile, some of their competitors are making automotive-grade lidar, significantly smaller devices—so you may need two of them—that are in the $500 [each] range. ... I think it's going to be a modest markup in cost for tremendous benefit."

So, by 2030 or earlier, if you believe Google and other automotive futurists, the transportation world will have changed forever, and it probably can't come fast enough for many of today's drivers. You only need to look around you on the road to estimate what portion would rather be texting, calling, eating breakfast or, ahem, Googling on their mobile devices. ▨

2004: The Defense Advanced Research Projects Agency (DARPA) offers a $1 million prize for a driverless vehicle able to complete a 142-mile course through the California and Nevada desert. Although the much-ballyhooed event draws high-powered teams from industry and academia, all 15 qualified vehicles either break or get stuck.
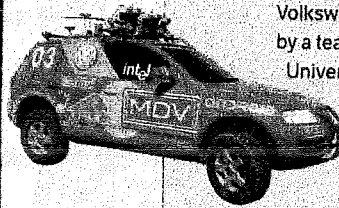
2005: Stanley, a driverless Volkswagen Touareg modified by a team from Stanford University, claims the second DARPA Grand Challenge—and a reward of $2 million. This time around, five of the 23 entrants complete the off-road course.

2007: Carnegie Mellon's DARPA team, which finished second in 2005, turns the table on Stanford and claims the $2 million prize for the Urban Challenge—the final DARPA event for autonomous vehicles—with a sensor-laden Chevrolet Tahoe.
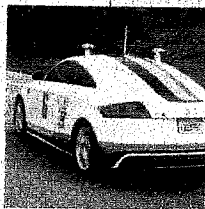
2010: An Audi TTS named Shelley (for rally legend Michèle Mouton) by its developers at Stanford makes it to the top of Pikes Peak. Over the next few years, it develops the road-racing chops to lap as quickly as race-car drivers.

2011: Unmanned electric-powered Ultra Global Personal Rapid Transit (PRT) pods begin operating on a 2.4-mile defined route from a remote parking lot to the U.K.'s Heathrow Airport.

2012: Nevada issues the first license for an autonomous car to a Toyota Prius modified by Google, whose driverless car program is headed by Sebastian Thrun and Chris Urmson, alumni, respectively, of the Stanford and Carnegie Mellon Grand Challenge teams.

MV 500
Poverty Action Programs
Neighborhood Crime (Firearms)

Reducing Gun Violence
   a. Community Involvement
   b. Outreach people / trust
   c. Police / Fire / Codes / Social
      Workers / Educators on the street

Program Success : Richmond, CA
   Reduced shootings / murders

Contact Person :
   Devone Boggan
   Neighborhood Safety Director
   Community Outreach
   Richmond,   CA.

Given: 28 men did over 70% of
        all shootings — 3 were
        killed before program began

        Outreach people talked to the
        25 about the program (21
        out of 25 came to meetings)

Richmond, CA   (con't)

Meetings : The 21 men were
           divided into 3
           groups - 3 separate
           meetings
(Many of these 21 men did not)
  have records due to lack of
  evidence and neighborhood cooperation)

Each was invited to join a program :

18 month Fellowship
7 Elements to program
After a successful first 6 months
in the program, a 12 month job
(fellowship) was offered to each
person (pay: $1000/mo for 12
months)

Interview: On the TV show :
           All In with Chris
                          Hayes
           MSNBC
           July 10, 2015