

IN THE SUPREME COURT OF THE STATE OF NEVADA

CITY OF LAS VEGAS, A POLITICAL
SUBDIVISION OF THE STATE OF
NEVADA,

Appellant,

vs.

180 LAND CO., LLC, A NEVADA LIMITED-
LIABILITY COMPANY; AND FORE STARS,
LTD., A NEVADA LIMITED-LIABILITY
COMPANY,

Respondents.

180 LAND CO., LLC, A NEVADA LIMITED-
LIABILITY COMPANY; AND FORE STARS,
LTD., A NEVADA LIMITED-LIABILITY
COMPANY,

Appellants/Cross-Respondents,

vs.

CITY OF LAS VEGAS, A POLITICAL
SUBDIVISION OF THE STATE OF
NEVADA,

Respondent/Cross-Appellant.

No. 84345

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**JOINT APPENDIX,
VOLUME NO. 75**

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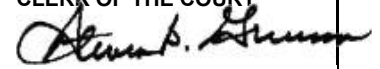
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15 **DISTRICT COURT**

16 **CLARK COUNTY, NEVADA**

17 180 LAND CO LLC, a Nevada limited liability
18 company, FORE STARS, LTD., a Nevada
19 limited liability company and SEVENTY
20 ACRES, LLC, a Nevada limited liability
21 company, DOE INDIVIDUALS I-X, DOE
22 CORPORATIONS I-X, and DOE LIMITED
23 LIABILITY COMPANIES I-X,

24 Plaintiffs,

25 v.

26 CITY OF LAS VEGAS, a political subdivision of
27 the State of Nevada; ROE GOVERNMENT
28 ENTITIES I-X; ROE CORPORATIONS I-X;
29 ROE INDIVIDUALS I-X; ROE LIMITED-
30 LIABILITY COMPANIES I-X; ROE QUASI-
31 GOVERNMENTAL ENTITIES I-X,

32 Defendants.

CASE NO.: A-17-758528-J

DEPT. NO.: XVI

**APPENDIX OF EXHIBITS IN
SUPPORT OF CITY'S OPPOSITION
TO PLAINTIFF'S MOTION TO
DETERMINE TAKE AND FOR
SUMMARY JUDGMENT ON THE
FIRST, THIRD, AND FOURTH
CLAIMS FOR RELIEF AND
COUNTERMOTION FOR SUMMARY
JUDGMENT**

VOLUME 15

33 The City of Las Vegas ("City") submits this Appendix of Exhibits in Support of the City's
34 Opposition to Plaintiff's Motion to Determine Take and For Summary Judgment on the First, Third,
35 and Fourth Claims for Relief and its Countermotion for Summary Judgment.

Exhibit	Exhibit Description	Vol.	Bates No.
A	City records regarding Ordinance No. 2136 (Annexing 2,246 acres to the City of Las Vegas)	1	0001-0011
B	City records regarding Peccole Land Use Plan and Z-34-81 rezoning application	1	0012-0030

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Exhibit	Exhibit Description	Vol.	Bates No.
C	City records regarding Venetian Foothills Master Plan and Z-30-86 rezoning application	1	0031-0050
D	Excerpts of the 1985 City of Las Vegas General Plan	1	0051-0061
E	City records regarding Peccole Ranch Master Plan and Z-139-88 phase I rezoning application	1	0062-0106
F	City records regarding Z-40-89 rezoning application	1	0107-0113
G	Ordinance No. 3472 and related records	1	0114-0137
H	City records regarding Amendment to Peccole Ranch Master Plan and Z-17-90 phase II rezoning application	1	0138-0194
I	Excerpts of 1992 City of Las Vegas General Plan	2	0195-0248
J	City records related to Badlands Golf Course expansion	2	0249-0254
K	Excerpt of land use case files for GPA-24-98 and GPA-6199	2	0255-0257
L	Ordinance No. 5250 and Excerpts of Las Vegas 2020 Master Plan	2	0258-0273
M	Miscellaneous Southwest Sector Land Use Maps from 2002-2005	2	0274-0277
N	Ordinance No. 5787 and Excerpts of 2005 Land Use Element	2	0278-0291
O	Ordinance No. 6056 and Excerpts of 2009 Land Use & Rural Neighborhoods Preservation Element	2	0292-0301
P	Ordinance No. 6152 and Excerpts of 2012 Land Use & Rural Neighborhoods Preservation Element	2	0302-0317
Q	Ordinance No. 6622 and Excerpts of 2018 Land Use & Rural Neighborhoods Preservation Element	2	0318-0332
R	Ordinance No. 1582	2	0333-0339
S	Ordinance No. 4073 and Excerpt of the 1997 City of Las Vegas Zoning Code	2	0340-0341
T	Ordinance No. 5353	2	0342-0361
U	Ordinance No. 6135 and Excerpts of City of Las Vegas Unified Development Code adopted March 16, 2011	2	0362-0364
V	Deeds transferring ownership of the Badlands Golf Course	2	0365-0377
W	Third Revised Justification Letter regarding the Major Modification to the 1990 Conceptual Peccole Ranch Master Plan	2	0378-0381
X	Parcel maps recorded by the Developer subdividing the Badlands Golf Course	3	0382-0410
Y	EHB Companies promotional materials	3	0411-0445
Z	General Plan Amendment (GPA-62387), Rezoning (ZON-62392) and Site Development Plan Review (SDR-62393) applications	3	0446-0466
AA	Staff Report regarding 17-Acre Applications	3	0467-0482

Exhibit	Exhibit Description	Vol.	Bates No.
BB	Major Modification (MOD-63600), Rezoning (ZON-63601), General Plan Amendment (GPA-63599), and Development Agreement (DIR-63602) applications	3	0483-0582
CC	Letter requesting withdrawal of MOD-63600, GPA-63599, ZON-63601, DIR-63602 applications	4	0583
DD	Transcript of February 15, 2017 City Council meeting	4	0584-0597
EE	Judge Crockett's March 5, 2018 order granting Queensridge homeowners' petition for judicial review, Case No. A-17-752344-J	4	0598-0611
FF	Docket for NSC Case No. 75481	4	0612-0623
GG	Complaint filed by Fore Stars Ltd. and Seventy Acres LLC, Case No. A-18-773268-C	4	0624-0643
HH	General Plan Amendment (GPA-68385), Site Development Plan Review (SDR-68481), Tentative Map (TMP-68482), and Waiver (68480) applications	4	0644-0671
II	June 21, 2017 City Council meeting minutes and transcript excerpt regarding GPA-68385, SDR-68481, TMP-68482, and 68480.	4	0672-0679
JJ	Docket for Case No. A-17-758528-J	4	0680-0768
KK	Judge Williams' Findings of Fact and Conclusions of Law, Case No. A-17-758528-J	5	0769-0793
LL	Development Agreement (DIR-70539) application	5	0794-0879
MM	August 2, 2017 City Council minutes regarding DIR-70539	5	0880-0882
NN	Judge Sturman's February 15, 2019 minute order granting City's motion to dismiss, Case No. A-18-775804-J	5	0883
OO	Excerpts of August 2, 2017 City Council meeting transcript	5	0884-0932
PP	Final maps for Amended Peccole West and Peccole West Lot 10	5	0933-0941
QQ	Excerpt of the 1983 Edition of the Las Vegas Municipal Code	5	0942-0951
RR	Ordinance No. 2185	5	0952-0956
SS	1990 aerial photograph identifying Phase I and Phase II boundaries, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0957
TT	1996 aerial photograph identifying Phase I and Phase II boundaries, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0958
UU	1998 aerial photograph identifying Phase I and Phase II boundaries, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0959

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Exhibit	Exhibit Description	Vol.	Bates No.
VV	2015 aerial photograph identifying Phase I and Phase II boundaries, retail development, hotel/casino, and Developer projects, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0960
WW	2015 aerial photograph identifying Phase I and Phase II boundaries, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0961
XX	2019 aerial photograph identifying Phase I and Phase II boundaries, and current assessor parcel numbers for the Badlands property, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0962
YY	2019 aerial photograph identifying Phase I and Phase II boundaries, and areas subject to inverse condemnation litigation, produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0963
ZZ	2019 aerial photograph identifying areas subject to proposed development agreement (DIR-70539), produced by the City's Planning & Development Department, Office of Geographic Information Systems (GIS)	5	0964
AAA	Membership Interest Purchase and Sale Agreement	6	0965-0981
BBB	Transcript of May 16, 2018 City Council meeting	6	0982-0998
CCC	City of Las Vegas' Amicus Curiae Brief, <i>Seventy Acres, LLC v. Binion</i> , Nevada Supreme Court Case No. 75481	6	0999-1009
DDD	Nevada Supreme Court March 5, 2020 Order of Reversal, <i>Seventy Acres, LLC v. Binion</i> , Nevada Supreme Court Case No. 75481	6	1010-1016
EEE	Nevada Supreme Court August 24, 2020 Remittitur, <i>Seventy Acres, LLC v. Binion</i> , Nevada Supreme Court Case No. 75481	6	1017-1018
FFF	March 26, 2020 Letter from City of Las Vegas Office of the City Attorney to Counsel for the Developer Re: Entitlements on 17 Acres	6	1019-1020
GGG	September 1, 2020 Letter from City of Las Vegas Office of the City Attorney to Counsel for the Developer Re: Final Entitlements for 435-Unit Housing Development Project in Badlands	6	1021-1026
HHH	Complaint Pursuant to 42 U.S.C. § 1983, <i>180 Land Co. LLC et al. v. City of Las Vegas, et al.</i> , 18-cv-00547 (2018)	6	1027-1122
III	9th Circuit Order in <i>180 Land Co. LLC; et al v. City of Las Vegas, et al.</i> , 18-cv-0547 (Oct. 19, 2020)	6	1123-1127
JJJ	Plaintiff Landowners' Second Supplement to Initial Disclosures Pursuant to NRCP 16.1 in 65-Acre case	6	1128-1137
LLL	Bill No. 2019-48: Ordinance No. 6720	7	1138-1142

Exhibit	Exhibit Description	Vol.	Bates No.
MMM	Bill No. 2019-51: Ordinance No. 6722	7	1143-1150
NNN	March 26, 2020 Letter from City of Las Vegas Office of the City Attorney to Counsel for the Developer Re: Entitlement Requests for 65 Acres	7	1151-1152
OOO	March 26, 2020 Letter from City of Las Vegas Office of the City Attorney to Counsel for the Developer Re: Entitlement Requests for 133 Acres	7	1153-1155
PPP	April 15, 2020 Letter from City of Las Vegas Office of the City Attorney to Counsel for the Developer Re: Entitlement Requests for 35 Acres	7	1156-1157
QQQ	Valbridge Property Advisors, Lubawy & Associates Inc., Appraisal Report (Aug. 26, 2015)	7	1158-1247
RRR	Notice of Entry of Order Adopting the Order of the Nevada Supreme Court and Denying Petition for Judicial Review	7	1248-1281
SSS	Letters from City of Las Vegas Approval Letters for 17-Acre Property (Feb. 16, 2017)	8	1282-1287
TTT	Reply Brief of Appellants 180 Land Co. LLC, Fore Stars, LTD, Seventy Acres LLC, and Yohan Lowie in <i>180 Land Co LLC et al v. City of Las Vegas</i> , Court of Appeals for the Ninth Circuit Case No. 19-16114 (June 23, 2020)	8	1288-1294
UUU	Excerpt of Reporter's Transcript of Hearing on City of Las Vegas' Motion to Compel Discovery Responses, Documents and Damages Calculation and Related Documents on Order Shortening Time in <i>180 Land Co. LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528-J (Nov. 17, 2020)	8	1295-1306
VVV	Plaintiff Landowners' Sixteenth Supplement to Initial Disclosures in <i>180 Land Co., LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528-J (Nov. 10, 2020)	8	1307-1321
WWW	Excerpt of Transcript of Las Vegas City Council Meeting (Aug. 2, 2017)	8	1322-1371
XXX	Notice of Entry of Findings of Facts and Conclusions of Law on Petition for Judicial Review in <i>180 Land Co. LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528-J (Nov. 26, 2018)	8	1372-1399
YYY	Notice of Entry of Order <i>Nunc Pro Tunc</i> Regarding Findings of Fact and Conclusion of Law Entered November 21, 2019 in <i>180 Land Co. LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528 (Feb. 6, 2019)	8	1400-1405
ZZZ	City of Las Vegas Agenda Memo – Planning, for City Council Meeting June 21, 2017, Re: GPA-68385, WVR-68480, SDR-68481, and TMP-68482 [PRJ-67184]	8	1406-1432

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Exhibit	Exhibit Description	Vol.	Bates No.
AAAA	Excerpts from the Land Use and Rural Neighborhoods Preservation Element of the City's 2020 Master Plan adopted by the City Council of the City on September 2, 2009	8	1433-1439
BBBB	Summons and Complaint for Declaratory Relief and Injunctive Relief, and Verified Claims in Inverse Condemnation in <i>180 Land Co. LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No.A-18-780184-C	8	1440-1477
CCCC	Notice of Entry of Findings of Fact and Conclusions of Law Granting City of Las Vegas' Motion for Summary Judgment in <i>180 Land Co. LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No.A-18-780184-C (Dec. 30, 2020)	8	1478-1515
DDDD	Peter Lowenstein Declaration	9	1516-1522
DDDD-1	Exhibit 1 to Peter Lowenstein Declaration: Diagram of Existing Access Points	9	1523-1526
DDDD-2	Exhibit 2 to Peter Lowenstein Declaration: July 5, 2017 Email from Mark Colloton	9	1527-1531
DDDD-3	Exhibit 3 to Peter Lowenstein Declaration: June 28, 2017 Permit application	9	1532-1533
DDDD-4	Exhibit 4 to Peter Lowenstein Declaration: June 29, 2017 Email from Mark Colloton re Rampart and Hualapai	9	1534-1536
DDDD-5	Exhibit 5 to Peter Lowenstein Declaration: August 24, 2017 Letter from City Department of Planning	9	1537
DDDD-6	Exhibit 6 to Peter Lowenstein Declaration: July 26, 2017 Email from Peter Lowenstein re Wall Fence	9	1538
DDDD-7	Exhibit 7 to Peter Lowenstein Declaration: August 10, 2017 Application for Walls, Fences, or Retaining Walls; related materials	9	1539-1546
DDDD-8	Exhibit 8 to Peter Lowenstein Declaration: August 24, 2017 Email from Steve Gebeke	9	1547-1553
DDDD-9	Exhibit 9 to Peter Lowenstein Declaration: Bill No. 2018-24	9	1554-1569
DDDD-10	Exhibit 10 to Peter Lowenstein Declaration: Las Vegas City Council Ordinance No. 6056 and excerpts from Land Use & Rural Neighborhoods Preservation Element	9	1570-1577
DDDD-11	Exhibit 11 to Peter Lowenstein Declaration: documents submitted to Las Vegas Planning Commission by Jim Jimmerson at February 14, 2017 Planning Commission meeting	9	1578-1587
EEEE	GPA-72220 application form	9	1588-1590
FFFF	Chris Molina Declaration	9	1591-1605
FFFF-1	Fully Executed Copy of Membership Interest Purchase and Sale Agreement for Fore Stars Ltd.	9	1606-1622

Exhibit	Exhibit Description	Vol.	Bates No.
FFFF-2	Summary of Communications between Developer and Peccole family regarding acquisition of Badlands Property	9	1623-1629
FFFF-3	Reference map of properties involved in transactions between Developer and Peccole family	9	1630
FFFF-4	Excerpt of appraisal for One Queensridge place dated October 13, 2005	9	1631-1632
FFFF-5	Site Plan Approval for One Queensridge Place (SDR-4206)	9	1633-1636
FFFF-6	Securities Redemption Agreement dated September 14, 2005	9	1637-1654
FFFF-7	Securities Purchase Agreement dated September 14, 2005	9	1655-1692
FFFF-8	Badlands Golf Course Clubhouse Improvement Agreement dated September 6, 2005	9	1693-1730
FFFF-9	Settlement Agreement and Mutual Release dated June 28, 2013	10	1731-1782
FFFF-10	June 12, 2014 emails and Letter of Intent regarding the Badlands Golf Course	10	1783-1786
FFFF-11	July 25, 2014 email and initial draft of Golf Course Purchase Agreement	10	1787-1813
FFFF-12	August 26, 2014 email from Todd Davis and revised purchase agreement	10	1814-1843
FFFF-13	August 27, 2014 email from Billy Bayne regarding purchase agreement	10	1844-1846
FFFF-14	September 15, 2014 email and draft letter to BGC Holdings LLC regarding right of first refusal	10	1847-1848
FFFF-15	November 3, 2014 email regarding BGC Holdings LLC	10	1849-1851
FFFF-16	November 26, 2014 email and initial draft of stock purchase and sale agreement	10	1852-1870
FFFF-17	December 1, 2015 emails regarding stock purchase agreement	10	1871-1872
FFFF-18	December 1, 2015 email and fully executed signature page for stock purchase agreement	10	1873-1874
FFFF-19	December 23, 2014 emails regarding separation of Fore Stars Ltd. and WRL LLC acquisitions into separate agreements	10	1875-1876
FFFF-20	February 19, 2015 emails regarding notes and clarifications to purchase agreement	10	1877-1879
FFFF-21	February 26, 2015 email regarding revised purchase agreements for Fore Stars Ltd. and WRL LLC	10	1880
FFFF-22	February 27, 2015 emails regarding revised purchase agreements for Fore Stars Ltd. and WRL LLC	10	1881-1882
FFFF-23	Fully executed Membership Interest Purchase Agreement for WRL LLC	10	1883-1890

Exhibit	Exhibit Description	Vol.	Bates No.
FFFF-24	June 12, 2015 email regarding clubhouse parcel and recorded parcel map	10	1891-1895
FFFF-25	Quitclaim deed for Clubhouse Parcel from Queensridge Towers LLC to Fore Stars Ltd.	10	1896-1900
FFFF-26	Record of Survey for Hualapai Commons Ltd.	10	1901
FFFF-27	Deed from Hualapai Commons Ltd. to EHC Hualapai LLC	10	1902-1914
FFFF-28	Purchase Agreement between Hualapai Commons Ltd. and EHC Hualapai LLC	10	1915-1931
FFFF-29	City of Las Vegas' First Set of Interrogatories to Plaintiff	10	1932-1945
FFFF-30	Plaintiff 180 Land Company LLC's Responses to City of Las Vegas' First Set of Interrogatories to Plaintiff, 3 rd Supplement	10	1946-1973
FFFF-31	City of Las Vegas' Second Set of Requests for Production of Documents to Plaintiff	11	1974-1981
FFFF-32	Plaintiff 180 Land Company LLC's Response to Defendant City of Las Vegas' Second Set of Requests for Production of Documents to Plaintiff	11	1982-1989
FFFF-33	September 14, 2020 Letter to Plaintiff regarding Response to Second Set of Requests for Production of Documents	11	1990-1994
FFFF-34	First Supplement to Plaintiff Landowners Response to Defendant City of Las Vegas' Second Set of Requests for Production of Documents to Plaintiff	11	1995-2002
FFFF-35	Motion to Compel Discovery Responses, Documents and Damages Calculation, and Related Documents on Order Shortening Time	11	2003-2032
FFFF-36	Transcript of November 17, 2020 hearing regarding City's Motion to Compel Discovery Responses, Documents and Damages Calculation, and Related Documents on Order Shortening Time	11	2033-2109
FFFF-37	February 24, 2021 Order Granting in Part and denying in part City's Motion to Compel Discovery Responses, Documents and Damages Calculation, and Related Documents on Order Shortening Time	11	2110-2118
FFFF-38	April 1, 2021 Letter to Plaintiff regarding February 24, 2021 Order	11	2119-2120
FFFF-39	April 6, 2021 email from Elizabeth Ghanem Ham regarding letter dated April 1, 2021	11	2121-2123
FFFF-40	Hydrologic Criteria and Drainage Design Manual, Section 200	11	2124-2142
FFFF-41	Hydrologic Criteria and Drainage Design Manual, Standard Form 1	11	2143
FFFF-42	Hydrologic Criteria and Drainage Design Manual, Standard Form 2	11	2144-2148
FFFF-43	Email correspondence regarding minutes of August 13, 2018 meeting with GCW regarding Technical Drainage Study	11	2149-2152

Exhibit	Exhibit Description	Vol.	Bates No.
FFFF-44	Excerpts from Peccole Ranch Master Plan Phase II regarding drainage and open space	11	2153-2159
FFFF-45	Aerial photos and demonstrative aids showing Badlands open space and drainage system	11	2160-2163
FFFF-46	August 16, 2016 letter from City Streets & Sanitation Manager regarding Badlands Golf Course Drainage Maintenance	11	2164-2166
FFFF-47	Excerpt from EHB Companies promotional materials regarding security concerns and drainage culverts	11	2167
GGGG	Landowners' Reply in Support of Countermotion for Judicial Determination of Liability on the Landowners' Inverse Condemnation Claims Etc. in <i>180 Land Co., LLC v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528-J (March 21, 2019)	11	2168-2178
HHHH	State of Nevada State Board of Equalization Notice of Decision, <i>In the Matter of Fore Star Ltd., et al.</i> (Nov. 30, 2017)	11	2179-2183
IIII	Clark County Real Property Tax Values	11	2184-2199
JJJJ	Clark County Tax Assessor's Property Account Inquiry - Summary Screen	11	2200-2201
KKKK	February 22, 2017 Clark County Assessor Letter to 180 Land Co. LLC, re Assessor's Golf Course Assessment	11	2202
LLLL	Petitioner's Opening Brief, <i>In the matter of 180 Land Co. LLC</i> (Aug. 29, 2017), State Board of Equalization	12	2203-2240
MMMM	September 21, 2017 Clark County Assessor Stipulation for the State Board of Equalization	12	2241
NNNN	Excerpt of Reporter's Transcript of Hearing in <i>180 Land Co. v. City of Las Vegas</i> , Eighth Judicial District Court Case No. A-17-758528-J (Feb. 16, 2021)	12	2242-2293
OOOO	June 28, 2016 Letter from Mark Colloton re: Reasons for Access Points Off Hualapai Way and Rampart Blvd.	12	2294-2299
PPPP	Transcript of City Council Meeting (May 16, 2018)	12	2300-2375
QQQQ	Supplemental Declaration of Seth T. Floyd	13	2376-2379
QQQQ-1	1981 Peccole Property Land Use Plan	13	2380
QQQQ-2	1985 Las Vegas General Plan	13	2381-2462
QQQQ-3	1975 General Plan	13	2463-2558
QQQQ-4	Planning Commission meeting records regarding 1985 General Plan	14	2559-2786
QQQQ-5	1986 Venetian Foothills Master Plan	14	2787
QQQQ-6	1989 Peccole Ranch Master Plan	14	2788
QQQQ-7	1990 Master Development Plan Amendment	14	2789
QQQQ-8	Citizen's Advisory Committee records regarding 1992 General Plan	14	2790-2807

Exhibit	Exhibit Description	Vol.	Bates No.
QQQQ-9	1992 Las Vegas General Plan	15-16	2808-3257
QQQQ-10	1992 Southwest Sector Map	17	3258
QQQQ-11	Ordinance No. 5250 (Adopting 2020 Master Plan)	17	3259-3266
QQQQ-12	Las Vegas 2020 Master Plan	17	3267-3349
QQQQ-13	Ordinance No. 5787 (Adopting 2005 Land Use Element)	17	3350-3416
QQQQ-14	2005 Land Use Element	17	3417-3474
QQQQ-15	Ordinance No. 6056 (Adopting 2009 Land Use and Rural Neighborhoods Preservation Element)	17	3475-3479
QQQQ-16	2009 Land Use and Rural Neighborhoods Preservation Element	18	3480-3579
QQQQ-17	Ordinance No. 6152 (Adopting revisions to 2009 Land Use and Rural Neighborhoods Preservation Element)	18	3580-3589
QQQQ-18	Ordinance No. 6622 (Adopting 2018 Land Use and Rural Neighborhoods Preservation Element)	18	3590-3600
QQQQ-19	2018 Land Use & Rural Neighborhoods Preservation Element	18	3601-3700

DATED this 25th day of August 2021.

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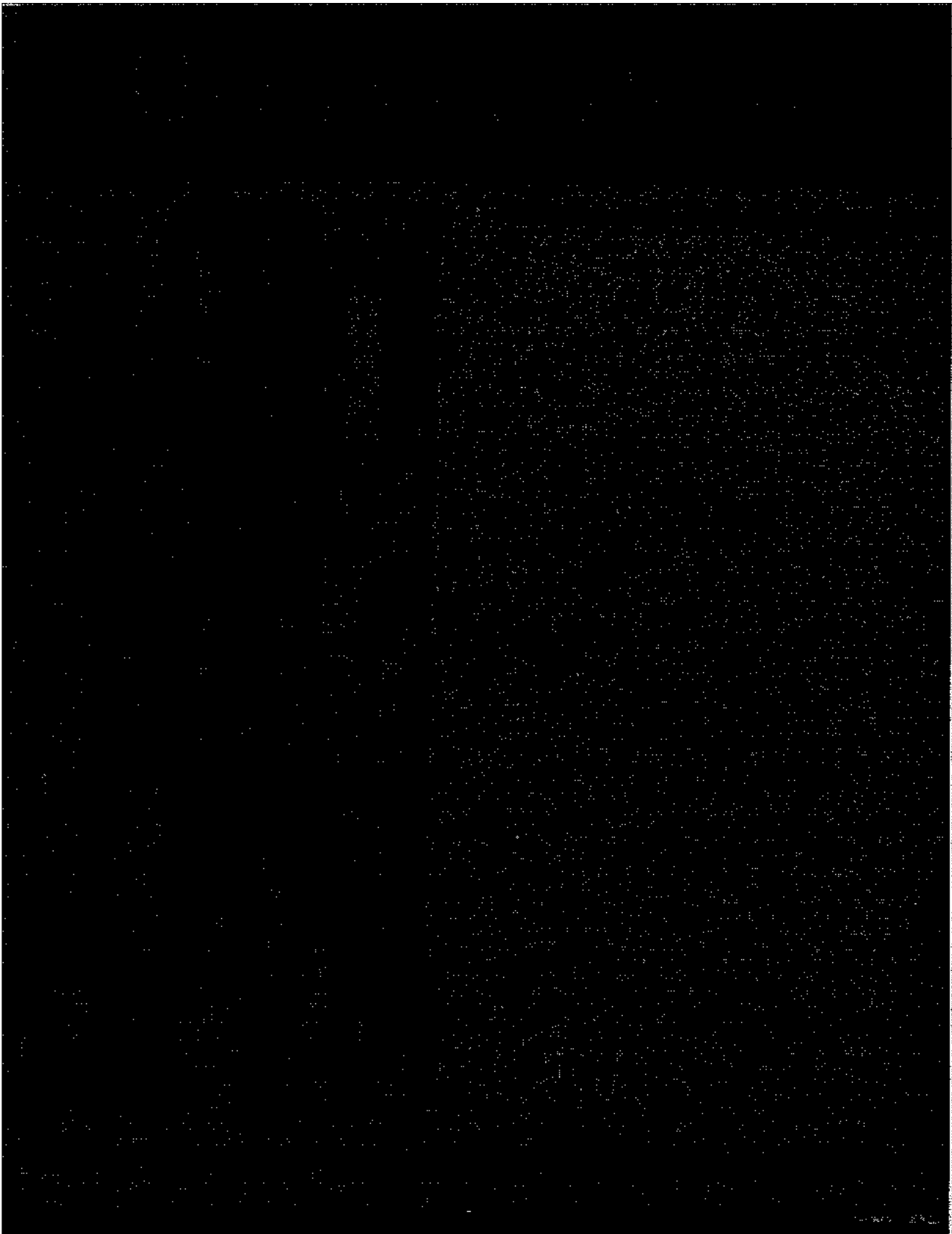
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I am an employee of McDonald Carano LLP, and that on the 25th day of August, 2020, I caused a true and correct copy of the foregoing **APPENDIX OF EXHIBITS IN SUPPORT OF CITY’S OPPOSITION TO PLAINTIFF’S MOTION TO DETERMINE TAKE AND FOR SUMMARY JUDGMENT ON THE FIRST, THIRD, AND FOURTH CLAIMS FOR RELIEF AND COUNTERMOTION FOR SUMMARY JUDGMENT – VOLUME 15** to be electronically served with the Clerk of the Court via the Clark County District Court Electronic Filing Program which will provide copies to all counsel of record registered to receive such electronic notification.

/s/ Jelena Jovanovic

An employee of McDonald Carano LLP

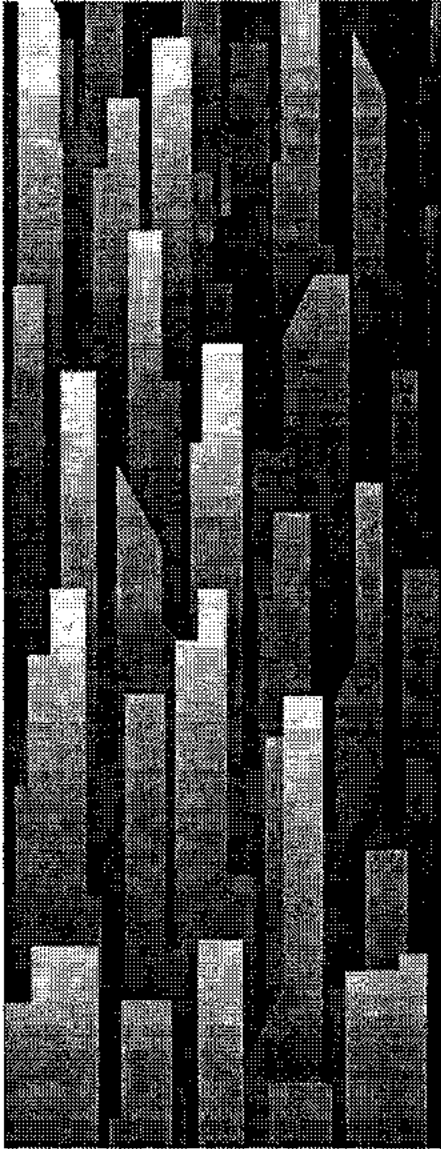
EXHIBIT “QQQQ-9”



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GENERAL PLAN



Land Use
Community Facilities
Infrastructure
Circulation
Public Finance
Economic Development
Housing
Urban Design
Environmental Quality
Historic Preservation

City of Las Vegas



400 E. Stewart
Las Vegas, NV 89101

Adopted by City Council April 1, 1992
Effective Date April 5, 1992

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City of Las Vegas General Plan

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Greater Las Vegas Assn. of Realtors
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Preservation Assn. of Clark County
Clark County Library District

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I. Introduction

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I. INTRODUCTION

1.1 Purpose and Scope of the Updated General Plan

The City of Las Vegas General Plan is the primary growth management tool and policy document used by City staff, the Planning Commission and City Council to guide the future growth and development of the City.

This General Plan has three basic characteristics:

- **It is generalized:** It provides general guidance and direction for City growth and development. More specific guidance is given with the implementation tools of the General Plan which include (primarily) the City's Zoning Regulations and Subdivision Regulations, and the Capital Improvement Plan for financing of public improvements.

- **It is comprehensive:** In addition to the primary components of Land Use, Community Facilities and Circulation, the General Plan addresses all of the components which affect the physical, economic and social concerns of the City and its residents. The elements include: Infrastructure (sewer, water supply, flood control, and solid waste); Public Finance; Economic Development; Housing; Urban Design; Environmental Quality and Natural Resource Conservation; and Historic Preservation.

- **It is long range:** It plans not only for the pressing concerns of today, but considers the ultimate needs of the community, with projections for "buildout" scenarios of its population based on recommended future land uses.

This General Plan is intended to function as a policy document that will guide growth and development within the City. It is not designed nor in-

tended to create rights in any person nor to create obligations on the part of the City.

1.2 The "Las Vegas 2000 and Beyond" Strategic Planning Program

The dynamic pace of growth, and related planning concerns, prompted the Mayor and the City Council to organize a community wide citizens task force to address a number of growth concerns and to provide a vision for the future of our City, and for the entire Valley. In January, 1989, the "Las Vegas 2000 and Beyond" Strategic Planning Program was inaugurated, chaired by the Mayor and co-chaired by the Chairman of the Clark County Board of Commissioners. This program involved over 300 citizens from throughout the Las Vegas Valley, representing a broad cross section of our population. Eight citizen committees were formed to address both the strengths and the weaknesses of Las Vegas, and to provide guidance for future planning in the following areas:

- Public Safety
- Environment
- Transportation
- Human Resources
- Economic Development
- Growth
- Quality of Life
- Resource Availability

Each of the "Las Vegas 2000 and Beyond" committees adopted a variety of specific "actions" to implement their areas of concern for growth management into the 21st century. All appropriate actions from each of the committees were integrated into the update of the General Plan. The updated General Plan also reflects the "Las Vegas 2000 and Beyond" Mission State-

ment: "create a continuing process which encourages economic growth, and which enhances our quality of life through innovative planning and implementation of actionable programs".

All relevant land use "actions", and in particular, the specific following actions of the Land Use Sub-Committee have been emphasized in this update:

1. Update the City's General Plan in coordination with the General/Master Plans of adjoining jurisdictions, and with ongoing regional transportation planning.

2. Develop methods of increased jurisdictional cooperation such as formation of a Las Vegas Valley Council of Governments, consolidation and/or a Valley-wide planning authority.

3. Improve Valley-wide coordination of zoning, building and code enforcement regulation and processing.

4. Investigate and encourage urban form alternatives to suburban sprawl, including nodal development concepts such as urban villages and activity/service centers, and neo-traditional (pedestrian oriented) planning concepts.

5. Implement neighborhood scale planning programs to maintain new neighborhoods, improve and revitalize older neighborhoods, and redevelop neighborhoods when appropriate.

1.3 The General Plan Update Process

In order to prepare an effective General Plan update, the following approach and steps were undertaken (see Figure 1, Critical Path for Major General Plan Elements):



1. Completion of the "Las Vegas 2000 and Beyond" strategic planning program, with the assistance of over 300 Las Vegas Valley citizens.

2. Preparation of initial draft revisions to the 1985 General Plan* by staff of the Department of Community Planning and Development, with input from the following departments: Building and Safety, Design and Development, Detention and Enforcement, Economic and Urban Development, Fire Services, Parks and Leisure, and Public Works.

3. Appointment by City Council of an 18 member Northwest Citizens Advisory Committee to work with staff to develop an Interim Northwest Area General Plan to deal with the immediate growth concerns of this rapidly developing rural area. The Interim Plan was completed and adopted by City Council on February 20, 1991.

4. Appointment by City Council of a 35 member General Plan Citizens Advisory Committee (CAC), and formation of a General Plan Technical Advisory Committee (TAC) comprised of City department heads.

5. Review, analysis and update of the 1985 General Plan by the CAC and TAC, with support and assistance by Planning staff and staff of all related City departments and regional agencies, to include:

- background data, research and analysis, and identification of issues;
- update of the Policy Document (City-wide Goals, Objectives, Policies and Programs); and
- update of the Community Profile Document (future land use designations), including review of all City land parcels.

6. Preparation by Planning staff, and review and recommendation by CAC and TAC, of an expanded format General Plan to include specific new

Elements pertaining to:

- Land Use
- Economic Development
- Circulation
- Housing
- Community Facilities
- Urban Design
- Infrastructure
- Environmental Quality and Natural Resource Conservation
- Public Finance
- Historic Preservation

7. Preparation of an Evaluation and Implementation Matrix (EIM) for each of the above Elements to provide:

- a method of measuring the implementation progress of the General Plan;
- a budgeting document for the programs of each Element; and
- a tool for further developing work programs.

8. Aggregation of the 16 individual Community Profile Area maps into three "sector" scale proposed future land use maps (Northwest, Southwest and Southeast: see Section 2.5 in the following Land Use Section) to provide a broader scope of reference for land use relationships than was possible with the smaller land areas covered by the Community Profile maps.

9. Preparation, with input of Planning staffs of Henderson, North Las Vegas and Clark County, of a generalized Valley-wide scale Future Land Use Plan Map.

10. Concurrent review and adoption of the Downtown/West Las Vegas Development Plan in conjunction with the Department of Economic and Urban Development.

11. Introduction of a new approach to the categorization of proposed future land uses by identifying Development Intensity Levels (D.I.L.) by traffic generation, rather than by the typical land use designations, for all land

parcels. A pilot study is underway in the Southwest Sector to demonstrate the application of this process, which will be applied to residential land parcels, non-residential parcels and a combination of both.

1.4 Population Growth and the Need for Growth Management

The Las Vegas Valley is one of the fastest growing areas in the country. Since adoption of the previous General Plan in 1985, extensive growth has occurred, and continues, in both the City and throughout the Valley. Existing development extends beyond the projected northwest growth boundary lines shown on the 1985 General Plan for the year 2000. The population of the City of Las Vegas increased by 57% from 1980 (164,674) to 1990 (258,295). Overall Clark County had a similar rate of growth (60%), with an increase in population from 463,087 in 1980 to 741,459 in 1990. The increases in specific sectors of the City are noted in the following table:

Table 1

CLV Population Changes: 1980-1990

Sector	Increase	% Change
SE	33,566	28
SW	57,859	186
NW	2,196	14
City-wide	93,621	57

1.5 Growth Management

Growth Management is a conscious government program intended to influence the rate, amount, type, location, and quality of future development

* See Appendix Volume, Chapter I, for overview of key elements of 1985 General Plan

within a local jurisdiction. It should be noted that this definition, which focuses on "actively guiding growth", differs from the notion of "nogrowth". Growth management programs may include statements of growth policy, development plans, and various traditional and innovative implementation tools including regulations, administrative devices, taxation programs, public investment programs, land acquisition programs, and other creative techniques.

As defined, the growth management process attempts to influence the "primary" characteristics of growth: rate, amount, type, location, and quality. These are the essential and major avenues through which the overall form and nature of development can be affected. A secondary set of growth features, which are in effect "impact" characteristics, such as environmental impact or fiscal impact, are outputs that result from the development process itself. Analyzing the impacts of development is one way to judge the effectiveness and equity of growth management. It is possible to limit negative growth impacts by managing the primary growth characteristics. For example, the negative fiscal impacts of new growth can be minimized by directing new development to locations already served by water and sewer systems and by relating the acceptable rate of development to levels that can be accommodated by adequate public facilities such as streets, water, fire etc.

1.6 Content Conformance with State of Nevada Statutes

Requirements for the contents of General Plans are contained in Nevada Revised Statutes (NRS), Section 278.160. The only required elements are a Population Plan and a Conservation Plan. However, this edition of the Las Vegas General Plan addresses the full list of categories suggested by

278.160, which includes: Land Use, Conservation, Economic, Population, Historic Properties Preservation, Recreation, Seismic Safety and Subsidence, Solid Waste Disposal, Streets and Highways, Transit, Community (Urban) Design, Housing, and Public Services and Facilities (defined as sewage, drainage and utilities). These topics have been restructured into ten plan elements. A major priority was placed upon linkage and consistency among all General Plan elements.

Additional and separate requirements for the Downtown Development Plan, which includes the adjacent West Las Vegas area (discussed under the following Southeast Sector Plan) are contained in NRS Section 279.382 - 279.680. Approval of the Downtown Development Plan was integrated with the overall General Plan preparation and approval process, in coordination with the Department of Economic and Urban Development and the Downtown Redevelopment Agency.

1.7 Intergovernmental Coordination

A major emphasis was also placed on intergovernmental coordination and cooperation among all City departments and other affected jurisdictions and agencies. Input and coordination were maintained with: Clark County Comprehensive Planning; the cities of Henderson and North Las Vegas; the Nevada Department of Transportation (NDOT) the Regional Transportation Commission (RTC); the Regional Flood Control District; the Las Vegas Valley Water District; The Bureau of Land Management; the Southern Nevada Homebuilders Association; the Greater Las Vegas Association of Realtors; the Environmental Research Center; the UNLV Center for Business and Economic Research; the Preservation Association of Clark County; the Colorado River Commission; the Clark County School District; the Las Vegas Metropolitan Police Depart-

ment; and the Clark County Library District.

1.8 Format of the Updated General Plan

Each of the following ten General Plan Elements contains the following sections:

1. An outline of the **Background** of existing conditions
2. The identification of major **Issues**
3. The development of the overall
 - **Goal:** the end result which is desired by the City for each of the elements, and the supporting:
 - **Objectives:** more specific (and more readily measured) aims, or expected results
 - **Policies:** courses of action that are proposed by the City to pursue a definite course of action to implement the Objectives
 - **Programs:** Specific tasks or work items to implement the Policies
4. The development of an **Evaluation and Implementation Matrix (EIM)** to coordinate and measure the implementation progress of the General Plan.

II. Land Use

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II. LAND USE

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2.1 Background

Land Use is the central element of the General Plan. The Land Use Plan is an expression of the City's goals for what its future pattern of development should be. It identifies the areas that are to be devoted to various land use types, including residential, commercial, industrial and various public land uses. The Land Use Plan also identifies the densities (for residential land uses) and intensities (for commercial and industrial land uses) which are desired, and the principles and standards which should be applied in implementation of land use decisions.

2.1.1 Relationship to Other Elements

In addition to being an important individual component, the Land Use Element is the keystone that ties together the following elements of the General Plan, as briefly described below:

Community Facilities Element

Land use impact considerations are essential to decisions for the location and physical needs of the following community facilities:

- Parks, Recreation and Cultural Facilities
- Police, Courts and Detention Facilities
- Fire Protection Facilities
- Education Facilities
- Library Facilities

The types of community facilities required vary with the types of land uses in various locations throughout the City. For example in the rural/agricultural Northwest area, the primary interest in parks, recreation and cultural facilities is equestrian trails. These trails will allow permanent access to the large public land (BLM and Floyd Lamb State Park) areas, in lieu of the

altogether too common practice of the past of gradual urbanization surrounding equestrian developments and cutting off such access. A series of parks can be developed as nodes along these trails. In contrast, more urban type park facilities are desired in higher density areas of the City.

Circulation Element

Land use considerations are related directly to the circulation systems (street, road and highway systems; rail systems; and pedestrian/bike/equestrian trail systems) which serve and link the various land parcels of the City. Land use forecasting (planning the distribution of residential and employment areas and activity centers) and travel demand forecasting (forecasting trip generation and distribution, and modal split) are closely inter-related and interdependent, as illustrated below in Figure 1, Relationship of Land Use Planning and Circulation Planning.

Infrastructure Element

The City's infrastructure system needs are directly related to the land uses which they serve. Principal among

these are:

- the sanitary sewer system (sewage treatment and distribution)
- the water supply system (from the Colorado River and groundwater sources)
- the flood control system (detention basins and connecting channels and controls)
- solid waste disposal facilities (land fill and collection/distribution sites)

Other infrastructure elements include public utilities (natural gas and electric systems). A balance must be maintained between infrastructure programming and land use to ensure the adequacy of facilities and service for all segments of the population, and to achieve a more energy-efficient and environmentally acceptable pattern of development.

Public Finance Element

A major share of public funds is expended for infrastructure projects to support land uses. These projects range from acquisition of right-of-way and construction for roads and highways, wastewater treatment facilities, and

acquisition of land and construction for public buildings, facilities, parks and open space.

Economic Development Element

The use and re-use of land is a critical factor in the development and redevelopment of a growing and vigorous economy. A stable and diversified economy requires commercial and industrial employment sites which are accessible to the worker, energy-efficient in location, environmentally suitable for development, cost-effective to serve with infrastructure, and compatible with surrounding areas and neighborhoods.

Housing Element

Residential land use is a major issue in the General Plan. It includes anticipation of the amount and location of a variety of housing types which provide: a choice of housing for households of diverse economic background, accessibility to employment centers and recreation areas, and site development and densities that are energy and water-efficient, cost-effective and visually attractive.

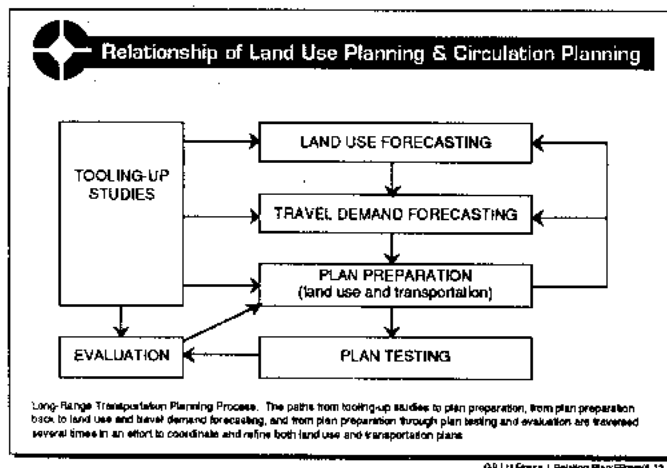
Urban Design Element

Urban design provides physical transitions between land uses of differing types and intensities. This is accomplished by urban design through the use of: building forms and massing, including height and setback requirements; landscape buffering, including plant materials and massing, and land forms (forms); hardscape details, including paving, walls and planters; circulation systems, including vehicular and pedestrian/bike/equestrian systems; and infrastructure systems, including drainage corridors as part of an open space system.

Environmental Quality and Natural Resource Conservation Element

The major environmental planning activities (air quality planning and management, solid-waste management and open-space planning to list the

Figure 1



most obvious) consider land use as part of the problem, and land use planning and management as part of the solution. Land use decisions on the location and size of automobile-dependent facilities are critical in maintaining acceptable ambient air quality standards. The density and intensity of land use in close proximity to critical natural resources and endangered species is a significant planning issue.

Historic Preservation Element

Historic preservation is now an important part of urban land use planning. More than being just a museum for historic architecture, historic preservation includes the adaptive reuse and rehabilitation of buildings, and the revitalization and redevelopment of older areas.

2.1.2 Existing Land Use Conditions

Accurate assessment of existing land use is an essential step in developing the recommended future land use patterns in a General Plan. A major task accomplished in the General Plan update was documentation of existing land use conditions throughout the City. This included the preparation of Existing Land Use Maps, by sector, as noted on the following maps for the Northwest, Southwest and Southeast sectors of the City. The process involved measuring the number of acres of each (generalized) land use category, including vacant land, as noted on Table 1 on the following page.

Northwest Sector Generalized Existing Land Use (Map 1). This sector has an established rural/agricultural lifestyle in the area north of Cheyenne Avenue and west of Decatur Boulevard. It is concurrently experiencing active and continuing development

pressure, including non-residential uses along the commercially zoned US-95 corridor. This sector has several large planned residential communities, Painted Desert, Los Prados, and Rancho Alta Mira which are shown on Map 4, Planned Communities.

Southwest Sector Generalized Existing Land Use (Map 2). This sector is the area west of Decatur Boulevard and south of Cheyenne Avenue. This sector contains many excellent examples of planned communities, including: The Lakes at West Sahara, Peccole Ranch, Canyon Gate Country Club, Desert Shores, South Shores, and the 23,180 acre (5,267 acres presently annexed) Summerlin satellite new town, with its first residential "village", Sun City Summerlin. These planned communities are also shown on Map 4.

Southeast Sector Generalized Existing Land Use (Map 3). This sector encompasses the more mature area of the City, east of Decatur Boulevard. As it is more fully built out, future growth in this area will include more extensive "infill" development. This sector includes the Downtown Las Vegas area, the world renowned entertainment and gaming center, which also functions as a regional commercial and office activity center, for which a comprehensive Downtown Development Plan has been completed, as discussed in Section 2.5.1.

2.1.3 Relationship of Zoning to Land Use Planning

Zoning is the major implementation tool of the General Plan. It is the process whereby a specific Zoning District classification is assigned to a land parcel by the City Council, following recommendation by the Plan-

ning Commission. Zoning is based on the "police powers" of the community: health, safety and welfare, and in more recent years, the aesthetic^{*} impact of the land use. The use of land as well as the density, intensity, height, bulk, setback and associated parking needs of buildings are regulated by the Zoning District requirements. The relationship of the Zoning District classification to the General Plan Future Land Use classification is shown in the following Table 2. Based upon Nevada Case Law (Nova Horizon, Inc., v. The City of Reno) the courts have held that the Master Plan is "a standard that commands deference and a presumption of applicability." The Nevada Supreme Court has held that Master Plans in Nevada must be accorded "substantial compliance," while Nevada statutes require that the zoning authority must adopt zoning regulations that are in substantial agreement with the Master Plan.


2.1.4 Development Intensity Level Land Use Classification

As outlined in Element I, Introduction, a new approach to the categorization of land uses is being implemented which uses Development Intensity Levels (DIL) by traffic generation and impact, rather than the traditional land use designations for all land parcels.

Variations of intensity systems have been successfully applied in other metropolitan areas. They involve analysis of existing city development patterns in terms of density (dwelling units per acre) for residential parcels, and in terms of intensity of floor area ratios or the maximum floor area of building permitted on a lot (FAR/1000 square feet of building) for all non-residential land uses.

^{*}Berman vs. Parker, 348 US 26, 75 Supreme Court 98, Ed. 27 (1954): "The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, and well-balanced as well as carefully patrolled."

Table 1

 City of Las Vegas Existing Land Use By Sector, By Acres								
C.P.*	Residential SFam	MFam	Public Fac	Commercial	Light Industry/ Research	R of W	Vacant	Totals
Northwest Las Vegas								
11	-	-	127	101	0	612	1,030	3,064
12	-	-	233	40	0	4,795	19,159	26,639
15	-	-	72	78	0	563	1,410	2,813
Total	4188	108	432	219	0	5,970	21,599	32,516
	12.88%	0.33%	1.33%	0.67%	0.00%	18.36%	66.43%	100.00%
Southwest Las Vegas								
7	-	-	185	202	0	530	1,100	2,647
8	-	-	57	141	0	561	301	2,808
9	-	-	273	53	57	972	2,546	4,858
10A-D	-	-	94	126	0	667	719	3,337
13	-	-	190	68	0	783	1,861	3,913
16	-	-	127	0	0	768	2,458	3,840
Total	4,469	2,095	926	590	57	4,281	8,985	21,403
	20.88%	9.79%	4.33%	2.76%	0.27%	20.00%	41.98%	100.00%
Southeast Las Vegas								
1	-	-	330	252	54	752	659	3,974
2	-	-	175	309	170	647	80	2,051
3	-	-	67	224	17	470	124	1,743
4	-	-	180	159	213	695	648	3,139
5	-	-	361	310	203	444	227	2,630
6	-	-	73	343	434	761	138	3,253
10E	-	-	0	20	0	134	157	504
Total	3,939	3,525	1,186	1,617	1,091	3,903	2,033	17,294
	22.78%	20.39%	7%	9%	6%	23%	12%	100%
City Totals								
	12,596	5,728	2,544	2,426	1,148	14,154	32,617	71,213
	17.69%	8.04%	3.57%	3.4%	1.61%	19.88%	45.8%	100%
* Community Profile Map #								

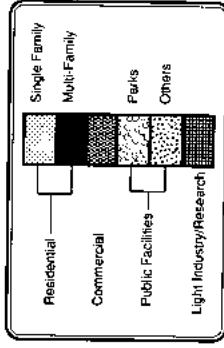
Source: City of Las Vegas Dept. of Community Planning & Development

GP.LU Table 1 CLV existing.FRI.pmx/4-14-92

Map 7

Northwest Sector Generalized Existing Land Use

LEGEND

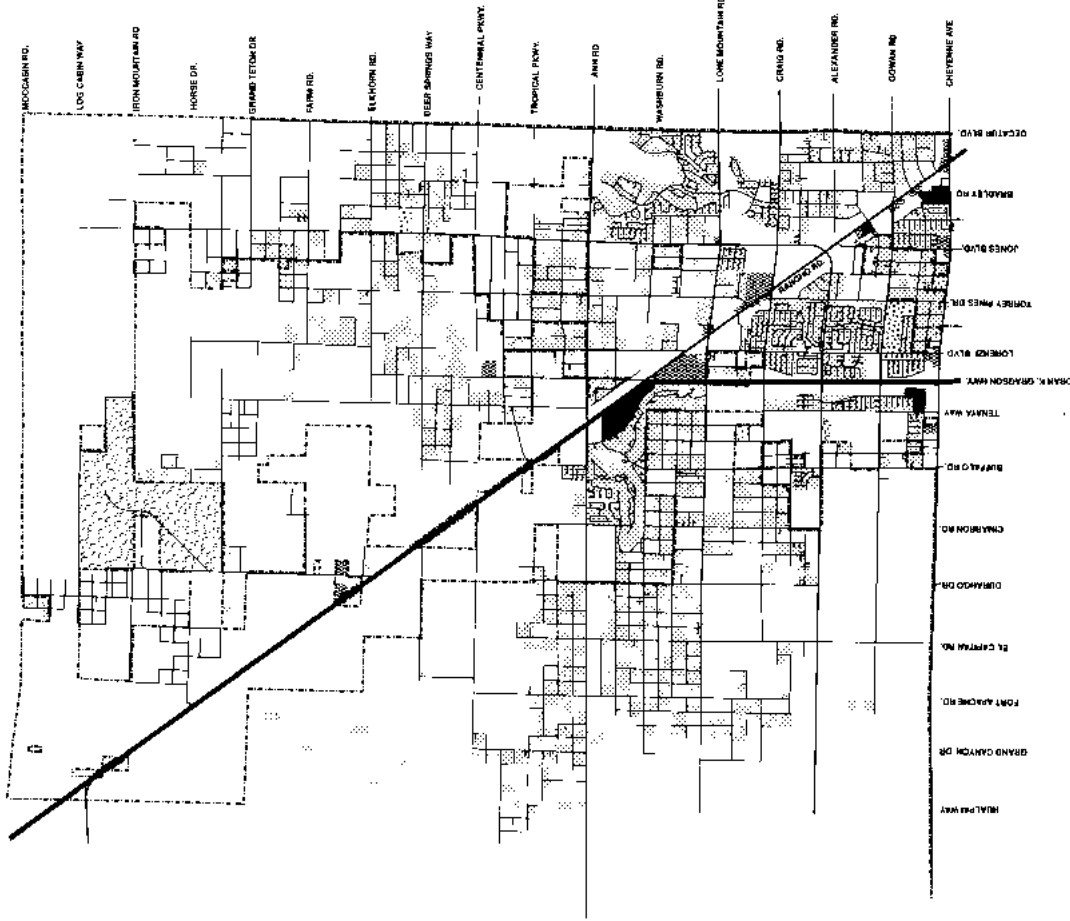


SOURCE: Dept. of Community Planning & Development

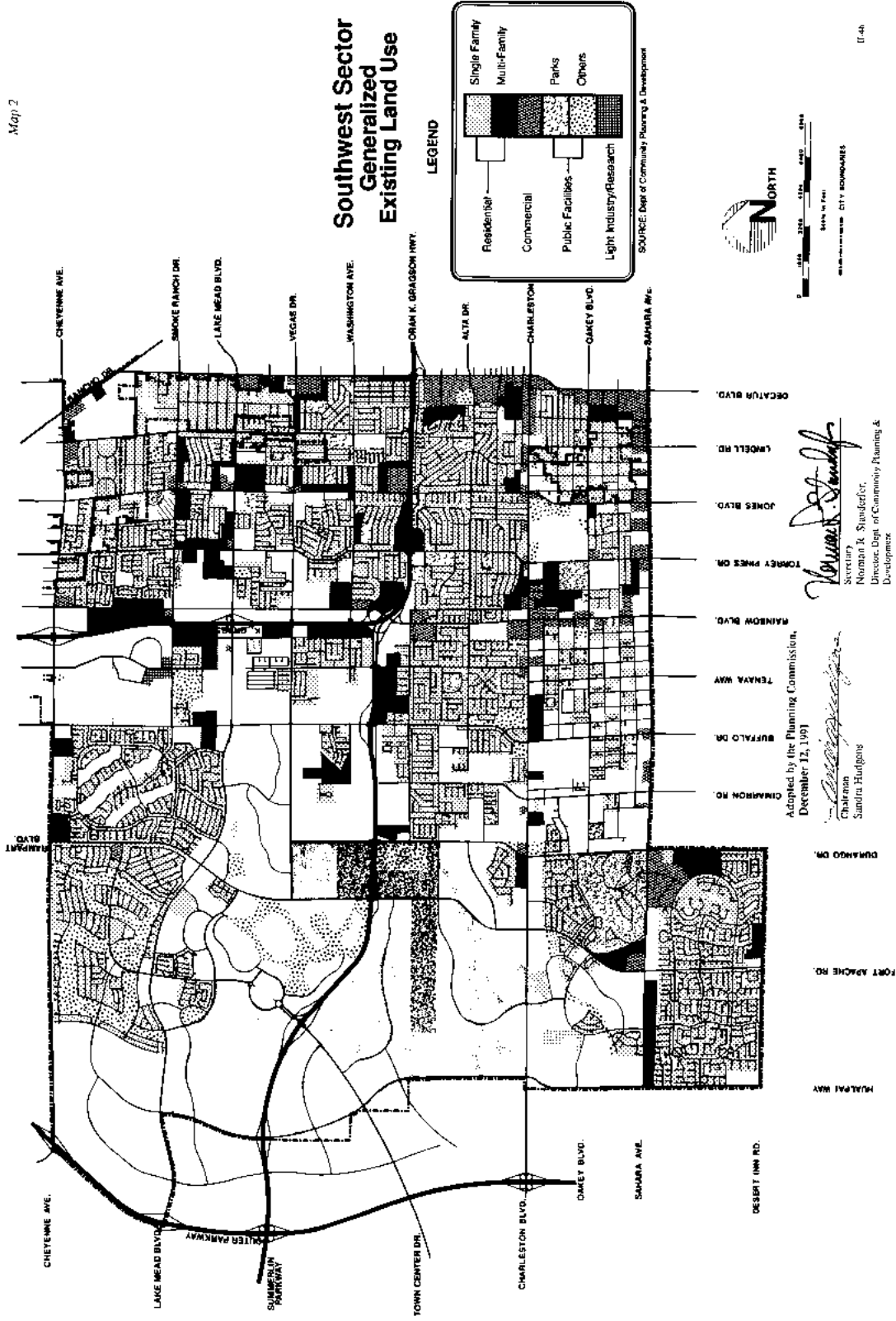
Adopted by the Planning Commission,
December 12, 1991

Chairman
Sandin Hudgins

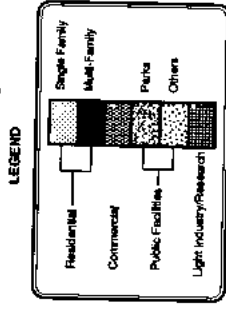
Secretary
Nurmuat R. Standiford
Director, Dept. of Community Planning & Development



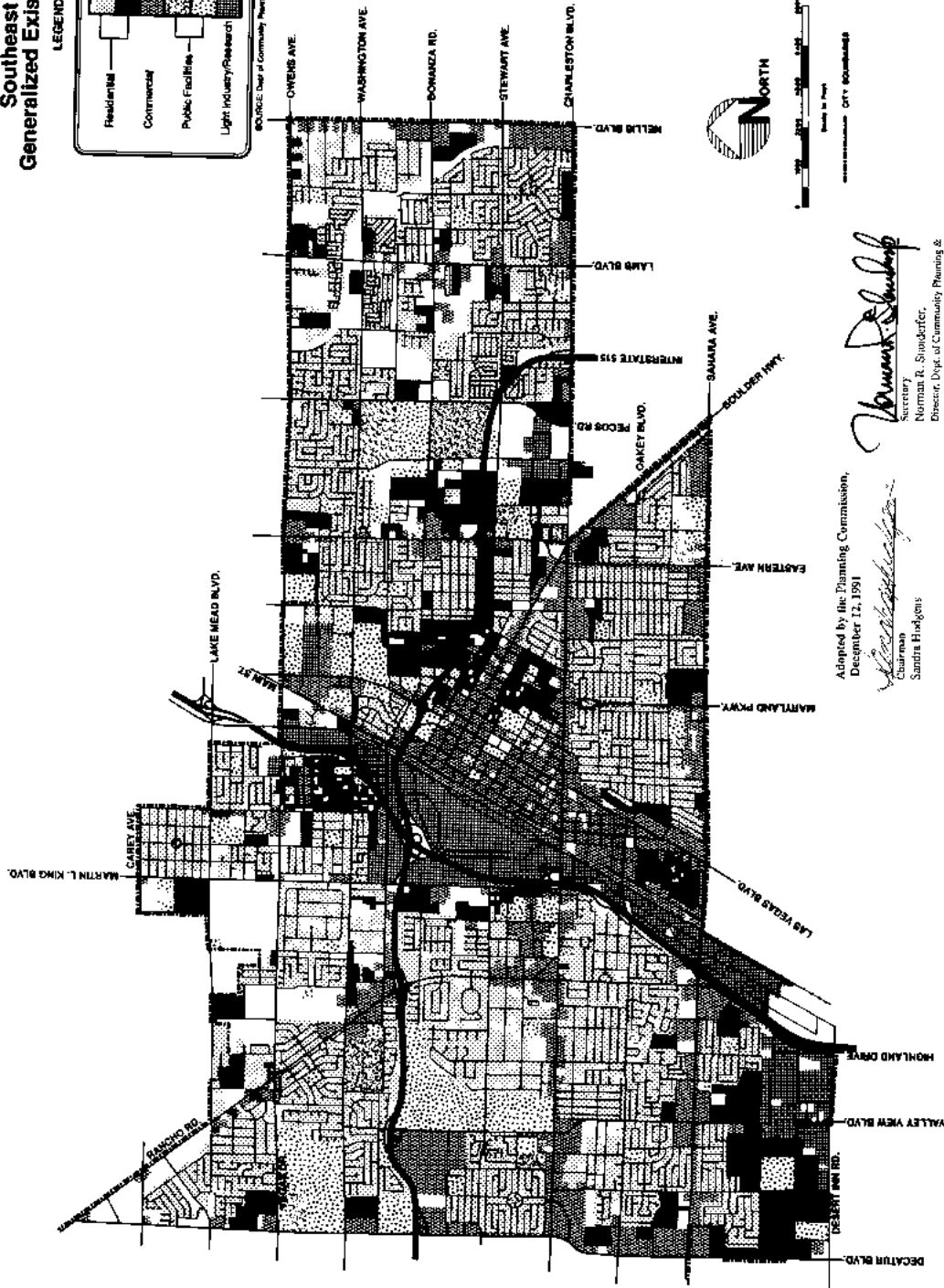
CLV053007
2825



Map 1
Southeast Sector
Generalized Existing Land Use



SOURCE: Dept. of Community Planning & Development



Adopted by the Planning Commission,
 December 12, 1991

Sandra Hodgson
 Chairman
 Sandra Hodgson

Norman B. Sunderfer
 Secretary
 Norman B. Sunderfer
 Director, Dept. of Community Planning & Development

11-4-

CLV053009
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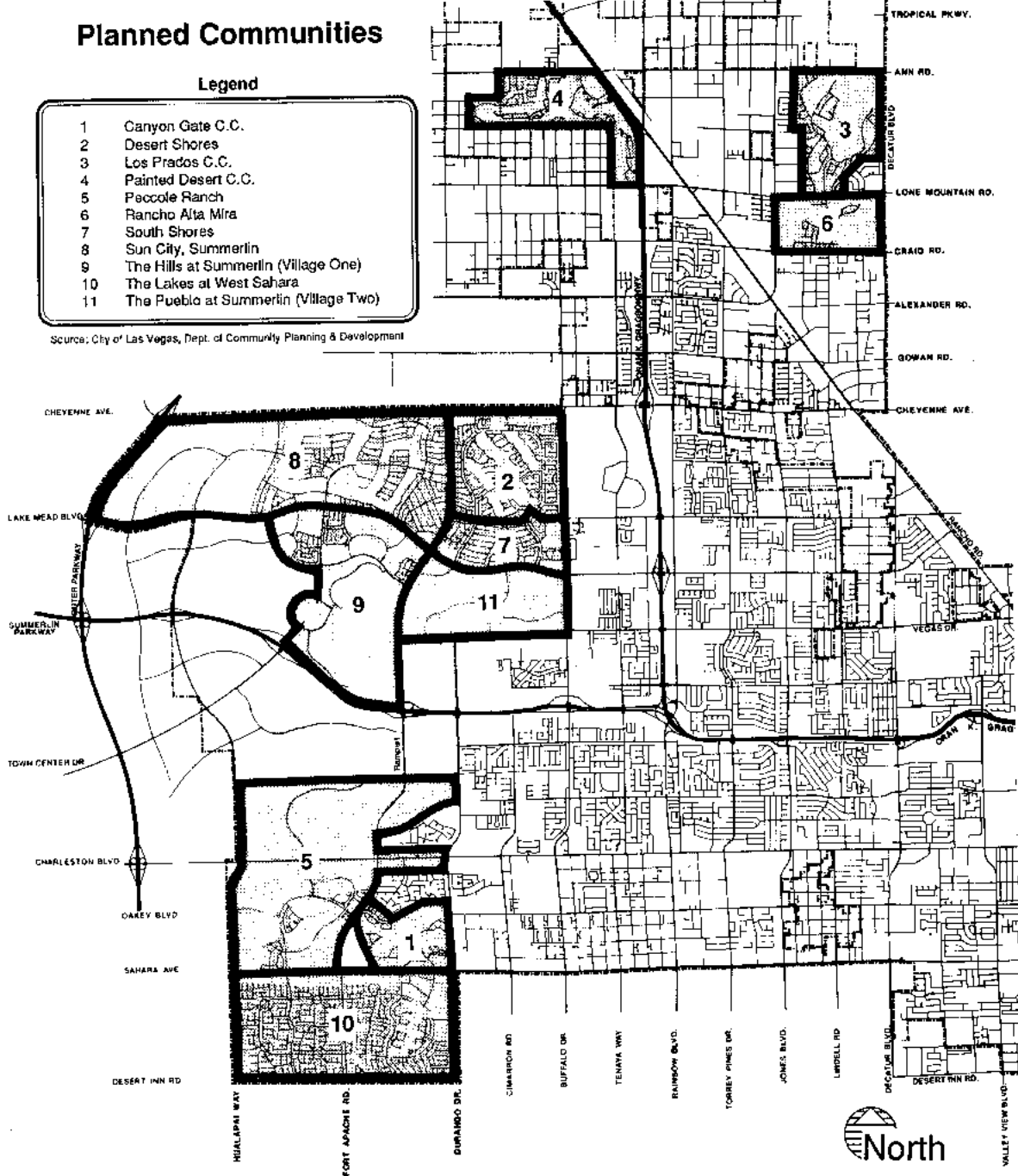
Map 4

Planned Communities

Legend

- 1 Canyon Gate C.C.
- 2 Desert Shores
- 3 Los Prados C.C.
- 4 Painted Desert C.C.
- 5 Pocolo Ranch
- 6 Rancho Alta Mira
- 7 South Shores
- 8 Sun City, Summerlin
- 9 The Hills at Summerlin (Village One)
- 10 The Lakes at West Sahara
- 11 The Pueblo at Summerlin (Village Two)

Source: City of Las Vegas, Dept. of Community Planning & Development




Land Use

II-4d

CLV053010
2828

13072

Table 2

 Land Use Categories Zoning District to General Plan Conversion	
<i>The following table converts the Zoning District Classifications of the City of Las Vegas Zoning Ordinance into the comparable Land Use Designations of the General Plan</i>	
ZONING DISTRICT CLASSIFICATION	COMPARABLE GENERAL PLAN LAND USE DESIGNATION
R-A (1 Du/Acre) (Ranch Acres) R-E (2 Du/Acre) (Residential Estates)	D-R (Desert Rural) ≤ 2.18 SFUE*/net Acre
R-E (2 Du/Acre) (Residential Estates) R-D (3 Du/Acre max.) (Single Family District) R-PD (3.96 Du/Acre) (Res. Planned Development)	R (Rural Density Residential) ≤ 0-3.96 SFUE*/net Acre
R-1 (4-5 Du/Acre) (Single Family) R-D (4 Du/Acre max.) (Single Family District) R-PD (3-6.7 Du/Acre) (Res. Planned Development) R-MH (4-5 Du/Acre) (Mobile Home Residential) R-CL (3-6.7 Du/Acre)	L (Low Density Residential) ≤ 6.70 SFUE*/net Acre
R-CL (Single Family Compact Lot Residential) R-2 (Two Family Residential) R-PD (9 SFUE) (Res. Planned Development) R-MHP (Residential Mobile Home Park)	ML (Medium Low Density Residential) ≤ 9 SFUE/Gross Acre
R-3 (Limited Multiple Residence) R-PD (13.27 SFUE) (Residential Planned Dev.)	M (Medium Density Residential) ≤ 13.27 SFUE/Gross Acre
R-4 (Apartment Residence) R-5 (Downtown Apartment) R-6 (High-rise Apartment) R-PD (16.58 SFUE) (Res. Planned Development)	H (High Density Residential) ≤ 16.58 SFUE/Gross Acre
P-R (Professional Offices & Parking) C-D (Designed Commercial) C-1 (Limited Commercial)	SC (Service Commercial/Office)
C-2 (General Commercial)	GC (General Commercial)
C-2 (General Commercial)	TC (Tourist Commercial)
C-M (Commercial/Industrial) C-PB (Planned Business Park) M (Industrial)	LI/R (Light Industry/Research)
C-V (Civic)	P (Parks/Recreation) S (School) PF (Public Facility)

* Single Family Unit Equivalent

GP, LU Table 2 ns' Conversion; NS.prv/12-30-91

The Residential Land Use Classification Schedules set forth in Table 3 provide the methodology for interpreting and determining the consistency of prospective development proposals to the adopted Land Use Maps with respect to the appropriateness of uses, the range of allowable dwelling unit densities or non-residential intensities. Any proposed use of land which conforms to the following schedules of Single Family Use Equivalents (SFUE)* for dwelling densities or Standard Floor Area Ratios for non-residential uses shall be deemed to be consistent with this Plan as indicated:

- A) **BOLD TYPE** - indicates maximum permitted density or intensity of primary land use.
- B) **Regular Type** - indicates range of secondary permitted land uses and equivalent maximum density or intensity of land uses which are consistent without a formal Plan amendment.
- C) **Blank** - indicates the use is not permitted in the Land Use Classification category. A formal Land Use Plan amendment is required prior to rezoning.

The D.L.L. process is an innovative and flexible concept for the planning of long term future land use impacts. The development of traffic related land use equivalent relationships for purposes of portraying future land use legends on Plan maps provides for a better growth management tool to coordinate land use planning with transportation and infrastructure planning and implementation.

The land use classification system used in this element has been designed to address initial recommendations for transition to a completed Development Intensity Level (DIL) system.

This initial land use classification system introduces the concept of residential housing type traffic impact equivalents. These residential equivalents are referred to as "single family unit equivalents" or "SFUE's."

Future non-residential land use traffic impact equivalent classifications will be developed and recommended for incorporation into this section, based on study and analysis now underway. These non-residential equivalents are referred to as "standard floor area ratio equivalents" or "SFARE's."

2.1.5 General Plan Land Use Classification System

The three broad land use types, residential, commercial and industrial, are

further subdivided into more specific categories, based on densities (residential) and intensities (commercial and industrial). These categories, together with various community facilities such as parks/recreation/open space, schools and other public facilities (which are institutional types of land uses), which are used on the recommended Future Land Use Plan maps, are set forth below:

Desert Rural Density Residential (DR) (≤ 2.18 SFUE/net ac). The Desert Rural Density residential category allows a maximum of two dwelling units per net acre. The predominant residential life-style is single family homes on large lots, many including equestrian facilities. This is a generally rural environment that permits greater privacy and some non-commercial raising of domestic animals. Lot sizes range

Table 3

Residential Land Use Classification Schedule						
DWELLING TYPE	DR	R	L	ML	M	H
SFUE*	2.18	3.96	6.70	9.00	13.27	16.58
Single Family Detached	2.18	3.96	6.70	9.00	9.00	9.00
Low Rise Apartment				13.57	20.00	25.00
Single Family Attached			12.09	16.23	23.93	29.91
High Rise Apartment					37.23	46.62
Mobile Home					7.14	7.14
Hotel per Room					20.67	25.77
Motel per Room					29.78	37.22
Congregate Care/Bed				43.08	43.08	43.06

* Single Family Unit Equivalent

GP.LU Table 3 na SFUE;NS;pmv4-12-92

* For previous designation of residential land use categories see Appendix Volume, Chapter II

from 20,000 to 40,000 square feet and greater. (The primary application of this category is in the Northwest Sector.)

Rural Density Residential (R)
(≤ 3.96 SFUE/net ac). The Rural Density residential category allows a maximum of three plus dwelling units per net acre. This is a rural or semi-rural environment with a life-style much like that of the Desert Rural, but with a smaller allowable lot size, ranging from 11,000 to 40,000 square feet and greater. (The primary application of this category is in portions of the Northwest Sector, and in the northeast and southeast portions of the Southwest Sector.) For a more detailed explanation of uses allowed in the Rural Density Residential (R) category and in the following Low Density Residential (L) category, as well as for a comparison of the City of Las Vegas vs. Clark County Zoning Regulation procedures for the DR and R categories, see the Land Use Section of the Appendix Volume of the General Plan)

Low Density Residential (L)
(≤ 6.70 SFUE/net ac). The Low Density residential category allows up to 6.7 dwelling units per net acre. This category permits single family detached homes, mobile homes on individual lots, gardening, home occupations, and family child care facilities. Lot sizes range from 6,500 to 11,000 square feet and greater. Local supporting uses such as parks, other recreation facilities, schools and churches are allowed in this category. (The primary application of this category is in the Southwest and Southeast sectors.)

Medium Low Density Residential (ML) (≤ 9.0 SFUE/gross ac). The Medium Low Density residential category permits up to 9 SFUE per gross acre. This density range permits a mixture of housing types: single family detached, including compact lots and zero lot lines; mobile home parks and two-family dwellings. Local supporting uses such as parks, other recreation

facilities, schools and churches are allowed in this category. Lot sizes range from 3,200 to about 6,500 square feet and greater. (The Medium Low Density category is found in all sectors, but predominates in the Southwest Sector, and in the Southeast Sector as in-fill.)

Medium Density Residential (M)
(≤ 13.27 SFUE/gross ac). The Medium density residential category permits up to 13.27 SFUE per gross acre. This category includes a variety of multi-family units such as plexes, townhouses, and low density apartments. (The Medium Density category is found in all sectors, but predominates in the Southwest and Southeast sectors, situated along primary and secondary streets, with a large concentration along the "west leg" of the Oran K. Gragson Highway.)

High Density Residential (H)
(≤ 16.58 SFUE/gross ac). The High Density residential category permits up to 16.58 SFUE per gross acre. (This category is generally found as low rise apartments in the "Downtown Area" and other areas of relatively intensive urban development in the Southeast Sector.) This category also permits traffic equivalent non-residential land use to occur.

Service Commercial (SC)
The Service Commercial category allows low to medium intensity retail, office or other commercial uses that serve primarily local area patrons, and that do not include more intense general commercial characteristics. Examples include neighborhood shopping centers and areas, theaters, bowling alleys and other places of public assembly and public and semi-public uses. This category also includes offices either singly or grouped as office centers with professional and business services.

General Commercial (GC)
General commercial allows retail, ser-

vice, wholesale, office and other general business uses of a more intense commercial character. These uses commonly include outdoor storage or display of products or parts, noise, lighting or other characteristics not generally considered compatible with adjoining residential areas without significant transition. Examples include new and used car sales, recreational vehicles and boat sales, car body and engine repair shops, mortuaries, and other highway uses such as hotels, motels, apartment hotels and similar uses. General Commercial uses allow Service Commercial uses.

Tourist Commercial (TC)
Tourist Commercial allows entertainment and visitor-oriented uses such as hotel, motel and casinos in addition to offices, light commercial resort complexes, recreation facilities, restaurants and recreational vehicle parks.

Office (O: Proposed New Category)
Office uses are now included in the Service and General Commercial categories. However it is important to plan for suitable Office uses in the General Plan as a transitional buffer between residential and commercial areas, and for planned office areas. Permitted office uses include business, professional and financial offices as well as offices for individuals, civic, social, fraternal and other non-profit organizations.

Light Industry/Research (LIR)
This Light Industry/Research category allows areas appropriate for clean, low-intensity (non-polluting and non-nuisance) industrial uses, including light manufacturing, assembling and processing, warehousing and distribution, and research, development and testing laboratories. Typical supporting and ancillary general uses are also allowed.

Parks/Recreation/Open Spaces (P)
This category allows large public parks and recreation areas such as public and private golf courses, trails and ease-

ments, drainage ways and detention basins, and any other large areas of permanent open land.

Schools (S)

This category allows public and private elementary, junior and senior high schools, but not commercial or business schools.

Public Facilities (PF)

This category allows large governmental building sites and complexes, police and fire facilities, non-commercial hospitals and rehabilitation sites, sewage treatment and storm water control facilities, and other uses considered public or semi-public such as libraries and public utility facilities.

2.2 Issues

Issue 1: Legal Significance of General (Master) Plans

The Nevada Supreme Court has held that there must be "substantial compliance" between the General (Master) Plan of a community and subsequent zoning approvals. The City of Las Vegas Ordinance 3455 implements this finding by requiring that any zoning application which proposes a use or density which deviates from the General Plan must include documentation of circumstances which the applicant believes warrants such deviation. With the adoption of this Plan, all future deviation requests shall be supported by a formal request to amend the Land Use Map, Classification Schedule or text, as the case may require.

Issue 2: Future Availability of Water

The unprecedented, and continuing, rapid rate of growth in the City and throughout the Valley, has raised concerns for future growth and land use patterns related to the future availabil-

ity of water and the resulting impact on the future population that is sustainable. This water supply issue needs to be addressed in the land use plans of the City, and of all Las Vegas Valley jurisdictions.

The Land Use Element of the General Plan guides the provision of services, such as water. It is important to properly allocate a scarce resource such as water so as to accommodate expected population growth. This may be done either through extension of water lines to vacant, developable areas, or by allowing infill development, taking advantage of land already served by water lines. Chapter 167, NRS, which established the Las Vegas Valley Water district, clearly requires that "the District shall comply with planning and zoning ordinances".

The Existing Land Use Maps (1, 2 and 3) and Table 1 of Section 2.1.2 depict the amount and location of vacant land in the City of Las Vegas. The following Table 4 indicates the calculations of potential buildout capacity (population) on the residential portions of this vacant land, based on the proposed future residential land use categories depicted on the Future Land Use Maps in Section 2.5.1. This vacant residential land could potentially sustain a total of 411,592 additional residents, which, combined with the existing 1990 Census population of 258,295 results in a total potential population capacity of 669,887 for the City.

Approximately 32,000 additional acre feet of water per year will be available to the Las Vegas Valley Water District for the foreseeable future (this is prior to savings from conservation, which take some time to effectively implement). The Las Vegas Valley Water District estimates that a typical single family residence for a family of four consumes 0.87 acre feet per year. Therefore, for the City's share (est. at

7,500 ac. ft.), it is estimated that there is only enough additional water for approximately 8,600 additional dwelling units, which, at an average household size of 2.55, equates to 22,000 additional residents, if no other uses were permitted.

Adding a population potential of 165,000 to 178,000* for future Summerlin annexations, results in a total population potential far in excess of that which the present water supply can sustain, given its need for other uses. Improved conservation measures, in addition to other potential sources of water, will alleviate the problem somewhat, but a serious water issue remains to be addressed.

Issue 3: Proper Balance of Land Uses

Review of existing land use conditions reveals a need to provide a proper balance of land uses throughout the City, including:

A. Residential Land Use:

1. Provide a full range of housing types and prices in all sectors of the City.
2. Provide affordable housing in all sectors of the City.
3. Provide protection for the existing nucleus of large lot, equestrian and agriculturally oriented, development in the northwest area, and the preservation of this lifestyle to preclude urbanization from isolating equestrian districts from areas of public open space.

B. Commercial Land Use: Provide the amount and location of commercial land use required to serve the projected population. Expanding the commercial center concept of the 1985 General Plan will place emphasis on planned centers with designated

* Summerlin Planning Report, July 15, 1991

Table 4



Potential Population Capacity on Vacant Residential Land By Sector and Land Use Category City of Las Vegas

City Sector	Land Use Category	CP Ref	Net Acres*	%	Total DU's Max**	%	Pop/ DU	Pop Total
NW (Map 1)	DR	11, 12, 15	5,640	29	11,280	11	2.55	28,764
	R		7,063	37	21,189	21	2.55	54,032
	L		2,060	11	12,282	12	2.55	31,319
	ML		4,032	21	48,389	49	2.55	123,392
	M		355	2	7,109	7	2.55	18,128
	H		-	-	-	-	2.55	-
TOTAL NW			19,150	100	100,249	100		255,635
SW (Map 2)	R	7-9, 13, 14 ^{2/} 16, 10 A-D	596	14	1,778	4	2.55	4,534
	L		1,370 ^{1/}	31	7,982 ^{1/}	18	2.55	20,354
	ML		1,868	43	22,167	52	2.55	56,526
	M		540	12	11,010	26	2.55	28,076
	H		-	-	-	-	2.55	-
TOTAL SW			4,374	100	42,937	100		109,490
SE (Map 3)	R	1-6 10E	49	4	110	1	2.55	281
	L		79	7	474	3	2.55	1,209
	ML		633	56	7,597	42	2.55	19,372
	M		321	28	6,481	35	2.55	16,527
	H		59	5	3,560	19	2.55	9,078
TOTAL SE			1,141	100	18,222	100		46,467
CITY TOTAL			24,665		161,408			411,592

Source: Dept. of Community Planning and Development 200' Scale land use maps, Community Profile maps, & field checks. Dwelling units for CP 16 from Derrigo Demographic studies. Reference aerial photograph flown June 1990.

* Net acres is vacant land exclusive of estimated deductions for rights of way.

** Total maximum dwelling units based on lot and parcel counts when available.

^{1/} 570 acres have been added to "L" category (5 DU's/net Ac) to reflect 2852 single family units in CP-16.

^{2/} Community Profile Map 14 is presently undeveloped and outside City boundaries.

GP.LU Table 4 Pot Capacity:HN;pm/10-22-81

service areas, rather than on continuing strip commercial development along major thoroughfares.

C. Light Industrial/Research Land Use: Diversify the economy by attracting new high-tech, nonpolluting, light industrial and research industries.

D. Office Land Use: Provide a specific new office land use category, for both the General Plan and the Zoning Ordinance, to replace the present process of providing office land use as an allowable land use in the broader commercial land use category. Two types of office land uses are needed:

1. A low intensity category to provide a buffer and transition between low density, single family detached residential uses and other more intense land uses, such as retail commercial, which typically have late night operations and trash storage and pick-up areas in the rear yards;
2. A high intensity planned office category, as opposed to commercial categories which allow office uses as a permitted use. However, mixed land uses can be accommodated with proper urban design guidelines and controls.

E. Activity/Employment/Service Centers: Develop centers throughout the City, with concentrations of land uses to include commercial, light industrial/research, office, recreational, entertainment and/or public facilities.

Issue 4: Neighborhood Scale Planning

An important process for implementing the General Plan is the concept of Neighborhood Planning, as outlined in the Las Vegas 2000 and Beyond strate-

gic planning program. Neighborhood planning needs to be addressed at three different levels throughout the City: stabilization, to prevent deterioration of newer neighborhoods; improvement (revitalization), for older neighborhoods; and redevelopment.

The Neighborhood Planning Program would identify and prioritize potential neighborhoods and neighborhood groups throughout the City for follow-on neighborhood scale planning. It would also identify and prioritize potential "corridor" study areas throughout the City. This could include protection of the functionality of the roadway corridors by determining development standards. An example of the need for such corridor studies is the US 95 corridor in the Northwest Sector, to develop a more efficient and environmentally satisfactory alternative to the existing commercially zoned (1320 foot wide) corridor by planning "nodes" of commercial/mixed use development, the spacing of which would be dependent upon the size of the commercial "service" areas.

The Neighborhood Planning Program can assist the Department of Economic and Urban Development in implementing the Downtown Development Plan. It can also analyze the effect of the planned expansion of the North Las Vegas Air Terminal on adjacent areas in the Northwest and Southwest sectors.

Issue 5: Alternatives to Urban Sprawl

As addressed in the "Las Vegas 2000 and Beyond" strategic planning program, there is a need to investigate new alternatives and approaches to urban sprawl and its effect on both land use and transportation. These alternatives can include:

- A. Developing new options to allow, and encourage, creative mixed land use developments (residential and

nonresidential) which would bridge existing regulatory gaps; the existing Residential Planned Development (R-PD) zoning district is applied primarily to the planning of single family residential subdivisions; the Planned Community (PC) zoning district is applicable only to large (3000 acres under one ownership) mixed use developments.

B. Investigation and encouragement of urban form alternatives to suburban sprawl such as urban villages, activity/service centers, and the pedestrian oriented "neo-traditional" planning concept which utilizes grid street systems. The latter concept has received national attention in recent months, and its application to the dynamically growing Las Vegas Valley needs to be addressed. This will include evaluation of the transportation impacts of the traffic engineering principles applied to this pedestrian oriented concept (grid street system, narrower streets, on-street parking and smaller corner radii), which are substantially different from the principles applied in conventional suburban development.

Several options now under staff and consultant review, which would supersede the existing process of requiring specific rezoning approvals for each separate land use category of a planned development. The first is a Mixed Use Overlay District concept and/or Planned Development District concept; the second is a proposed new approach to the categorization of proposed future land uses by identifying allowable Development Intensity Levels (D.I.L.) by traffic generation, rather than by the typical land use parcel designations. A pilot study is underway in the Southwest Sector, based on the use of Floor Area Ratio (FAR) standards, to demonstrate the application of this process. Additional recommendations regarding these techniques will be developed following the General Plan adoption.

Issue 6: Valley-wide Coordination of Land Use Planning

The unprecedented growth in the City of Las Vegas, and throughout the Las Vegas Valley, requires closer coordination of land use planning, and related circulation/transportation planning among all Las Vegas Valley jurisdictions. The future land use plans of all adjacent Las Vegas Valley jurisdictions needs to be coordinated to ensure compatibility along boundaries and to ensure equitable and efficient provision of services.

As stated in the Las Vegas 2000 and Beyond "actions" this coordination can include:

- A. Updating the City's General Plan in coordination with the General/Master Plans of adjoining jurisdictions, and with regional transportation planning; and
- B. Developing methods of increased jurisdictional cooperation such as formation of a Las Vegas Valley Council of Governments, consolidation and/or a Valley-wide planning authority.

2.3 Goal, Objectives, Policies and Programs

GOAL: Develop and adopt a future land use plan which:

- is maintained as the principle policy document of the City for guiding future land use decisions;
- provides an efficient, orderly and compatible mix of land uses;
- is coordinated with the circulation systems which serve the land uses;
- promotes the provision of orderly development with adequate community facilities and services;
- promotes water conservation; and
- is coordinated with the land use and circulation plans of all adjoining jurisdictions

Objective A: Develop and maintain the City of Las Vegas General Plan as the principal policy document of the City for establishing future land uses in conjunction with community facilities, infrastructure systems, circulation systems, and resource conservation.

Policy A1: Evaluate all City actions and programs in terms of implementation of the goals and objectives set forth in the General Plan.

Program A1.1: In the annual review of the City's Capital Improvement Plan, consider the applicable General Plan Policies and Programs.

Program A1.2: Prepare a biennial review of the General Plan, with the Citizens General Plan Advisory Committee (CAC) and the Technical Advisory Committee (TAC), for Planning Commission review and recommendation and City Council approval.

Objective B: In developing the Future Land Use Plan, consider the potential future population which can be sustained by the existing water supply, while maintaining or improving the existing quality of life.

Policy B1: Balance "infill" development areas with development on the periphery of the City to ensure efficient utilization and distribution of the available water supply.

Program B1.1: Prepare Existing Land Use Maps which identify vacant land parcels within the City and calculate the acreage and potential buildout capacity (population) on all vacant infill land parcels.

Program B1.2: Determine boundaries for "infill" lines, considering Water District pressure zones.

Program B1.3: Continue to monitor the water issue to remain aware of and encourage implementation of new conservation methods and techniques, and potential new sources of water supply.

Policy B2: Encourage infill development to make use of existing utilities, facilities and services.

Program B2.1: Establish and implement guidelines for infill development, with consideration for adjacent properties.

Program B2.2: Consider providing an incentive program for infill development

Objective C: Achieve a compatible balance of land uses throughout the City by providing appropriate and compatible locations for all land use categories.

Policy C1: Provide for a variety of residential environments in the General Plan having urban, suburban and rural character.

Program C1.1: Define and designate urban, suburban and rural residential land use areas.

Program C1.2: Designate specific low density, equestrian oriented, residential land use districts to protect and enhance the existing rural development and established life-style. Recognizing that significant portions of the study area are of unincorporated County jurisdiction and that the possibility of annexation exists, designation of low-density land use districts should also be recommended for what is presently in adjacent County areas.

Program C1.3: Plan for the appropriate location of multiple family residential uses throughout the City.

Program C1.4: Require multiple family developments to be compatible with adjoining single family uses through site planning and building design, setback and height requirements, landscape buffers and other buffers to adjoining uses.

Program C1.5: Develop standards for mobile home developments which require designs compatible with adjoining residential uses.

Policy C2: Provide for a balance in the amount and location of commercial land use to serve the projected "buildout" population.

Program C2.1: Plan commercial land uses in locations to provide essential goods and services throughout the City, with emphasis on planned commercial centers in lieu of "strip commercial" development.

Program C2.2: Develop and incorporate commercial "service area" standards.

Program C2.3: Develop a low intensity Office land use category as a land use buffer between low density detached residential uses and more intense land uses.

Program C2.4: Develop a high intensity planned Office land use category.

Policy C3: Encourage the development of suburban Activity/Employment/Service Centers, with concentrations of land uses to include commercial, light industrial, research, office, recreational, entertainment and/or public facilities to enhance the economic, social and physical development and vitality of the City and diversify the economic base, while reducing travel time and dependency on the automobile.

Program C3.1: Designate locations for specific Activity, Employment, Service Centers coordinated with transportation, infrastructure and public facilities plans.

Program C3.2: Provide incentives for Activity, Employment, Service Center development.

Program C3.3: Implement the Downtown Development Plan as the primary Activity Center of the City including hotel, casino, entertainment uses; administrative headquarters; general, professional and public offices; commercial uses; and high density residential uses.

Objective D: Develop a Creative, City-wide, Neighborhood Planning and Development Program.

Policy D1: Implement a Neighborhood Planning and Development Program for each of the Council Wards.

Program D1.1: Identify, and prioritize, neighborhoods and neighborhood organizations within each Council Ward for neighborhood scale planning.

Program D1.2: Identify, and prioritize, locations for major corridor studies and plans.

Objective E: Investigate new alternatives to urban sprawl which encourage creative land use planning and urban design.

Policy E1: Encourage and develop options, guidelines and incentives for the use of innovative master development plans.

Program E1.1: Investigate options for creative mixed use planned developments (residential and non-residential), to bridge the regulatory gap between existing options, which provide a compatible mix of residential densities and supporting commercial uses through innovative site planning.

Program E1.2: Investigate application of the pedestrian oriented "neo-traditional" planning and design concepts, to include evaluation of the applicability and suitability of the traffic engineering principles applied in this concept of development.

Policy E2: Support implementation of a flexible categorization of future land uses through identification of Development Intensity Levels related to traffic generation and impact, to replace current use plan designations.

Program E2.1: Prepare a Development Intensity Level (D.I.L.) pilot study in a rapidly developing area of the City.

Program E2.2: Apply the Development Intensity Level (D.I.L.) process to a City-wide program and map.

Objective F: Update the City of Las Vegas General Plan in coordination with the land use and circulation plans of all adjoining jurisdictions.

Policy F1: Cooperate with other jurisdictions to define planning and service areas.

Program F1.1: Develop a Valley-wide, generalized, Future Land Use Map by aggregating the General/Master plans of all Las Vegas Valley jurisdictions.

Program F1.2: Identify and resolve any conflicts along jurisdictional boundaries.

Policy F2: Investigate methods of increased jurisdictional cooperation such as formation of a Las Vegas Valley Council of Governments, consolidation and/or a Valley-wide planning authority.

Program F2.1: Investigate the potential for formation of a Valley-wide planning authority, or Council of Governments.

Program F2.2: Develop methods of increased coordination of zoning, building and code enforcement regulations and processing.

Policy F3: Establish a growth pattern which will result in a more efficient and equitable provision of infrastructure, public facilities and services.

Program F3.1: Encourage the elimination of irregular City boundaries and County "islands" which result in overlapping and inefficient service areas.

Program F3.2: Seek state legislation to simplify and expedite the annexation process.

Program F3.3: Prepare Capital Improvement Plans and schedules for public facilities and services in conformance with the adopted General Plan future land use plans.

Program F3.4: Implement a growth management program which integrates land development approval decisions and General Plan adherence and consistency requirements with adequate public facilities and service standards.

2.4 Evaluation and Implementation Process

2.4.1 Land Use Plan Consistency and Development Review Policies

It is the Intent of the City Council that implementation of the adopted General Plan become a coordinated activity among elected officials, boards and commissions and City staff. The Land Use Plan shall be implemented by the adoption and enforcement of appropriate local regulations pertaining to the development of land and structures within the City of Las Vegas. It is the intent of the City Council that no development permit, subdivision of land or application for zoning change may be recommended, authorized, approved or issued by any administrative official, board or commission or by the City Council unless such development activity is determined to be in compliance and consistent with the adopted Future Land Use Plan (Section 2.5), Land Use Classification System (Section 2.1.3) and Development Review Policies set forth in this section as they may be amended from time to time. The Department of Community Planning and Development, in conjunction with other City departments, shall, on all zoning and subdivision applications, prepare a staff report to the Planning Commission and City Council which would take into account the following:

A. Plan Consistency Policies

It is the intent of the City Council that:

1. All parcels of land within the City of Las Vegas which are designated in a residential land use category in the Land Use Plan shall be appropriately zoned for a density of dwelling units which is compatible with surrounding residential uses and which does not exceed the maximum density set forth in the Land Use Classification System, except in the case of large scale planned development projects, where certain parcels may exceed maximum Land Use Plan densities on a net acre basis, provided the total gross project density per acre does not exceed that provided under the Land Use Plan.
2. No application for a subdivision of land or a change in zoning district classification which would have the effect of permitting the use of land or structures in a manner inconsistent with the Land Use Plan and/or the Land Use Classification System may be approved without filing a simultaneous request to the City Council to consider a formal Plan amendment. In order for such zoning change to be approved, the City Council must hold a public hearing, consider Planning Commission recommendations, and formally amend the Land Use Plan map and/or Land Use Classification.
3. No land use variance which would have the effect of permitting the use, density or intensity of land or structures in a manner inconsistent with the Land Use Plan and/or Land Use Classification System shall be approved. Setback, height, parking and similar bulk requirements may be approved in accordance with findings for hardship and other related issues.
4. Building permits shall comply with all requirements and conditions of prior development approval before issuance of certificates of occupancy. No building permit shall be issued for any structure not possessing a valid water commitment or "will serve" letter issued by the Las Vegas Valley Water District prior to February 15, 1991, or a valid Water Allocation Locational Commitment letter issued by the City of Las Vegas after such date.
5. Applicants seeking a change in zoning shall submit for City review a formal Traffic Impact Analysis report prepared by a licensed engineer demonstrating the individual and cumulative impacts of proposed land uses on the local and regional transportation network. Such report and review shall identify the nature and quantity of traffic movement and circulation, average daily traffic (ADT) and peak hour traffic (PHT) volumes and mitigation requirements necessary to assure the maintenance of acceptable levels of service. Such Traffic Impact Analysis reports must adhere to the standards and methodologies promulgated by the City's Traffic Engineering Division and adopted by the City Council. Requests to extend zoning resolutions of intent (ROI) and Tentative Map approvals will subject the application to evaluation and adherence to development review requirements, adequate facilities and services reviews, and consistency requirements of this section.
6. Applicants seeking to subdivide land in the City of Las Vegas after adoption of the General Plan may submit for a tentative map or parcel map approval only when:
 - a. The proposed division of land is consistent with the adopted Land Use Plan as to density or intensity of proposed uses; and
 - b. The proposed lot sizes are consistent with existing zoning or a proposed zoning district which would be consistent

with the adopted Land Use Plan without necessity for an amendment public hearing.

7. In considering the consistency of proposed development permits, zoning changes and subdivisions of land, the Planning Commission, the Board of Zoning Adjustment or the City Council as the case may be, shall ensure that each such approved development meets or exceeds the minimum levels of adequacy for facilities and services set forth in the General Plan.

B. Development Review Policies

It is the intent of the City Council that no City Official, Board or Commission or the City Council shall recommend, approve, authorize or grant any project or development permit which is not consistent with the following Development Review Policies. It is the intent of the City Council that authorized City Officials, Boards and Commissions and the City Council of the City of Las Vegas, as the case may be, shall make findings that any recommended project approval and all applications for development permits are consistent with the provisions of this section and shall approve such project or development permit only when the following requirements are met, provided however that a project or development approval may be granted on the condition that the developer agrees in writing that no certificate of occupancy will be issued until the following conditions are met:

1. The network of regional and local streets and highways will have the capacity to serve the proposed development at an acceptable Level of Service. For purposes of this section, an acceptable level of service shall be determined by the City Council and may vary by type of street or location. Unless otherwise adopted by the City Council, no

level of service shall be established on a designated street or highway which results in a peak hour travel capacity below Level of Service D.

2. Wastewater treatment and disposal facilities will be made available prior to occupancy in sufficient capacity to serve the needs of the proposed development.
3. Fire services will be adequate to protect people and property in the proposed development with adequate equipment and acceptable response times. For purposes of this section, the City Council may vary standards for adequacy and acceptable response times based upon the nature, location, character, density and intensity of existing and proposed development.
4. Potable water facilities and service allocations will be available prior to occupancy to provide for the needs of the proposed development. For purposes of this section, the evidence of a valid commitment to water service provided by the Las Vegas Valley Water District prior to adoption of this Plan shall constitute compliance. After the effective date of this General Plan, the City Council shall establish a review process, incorporating an appropriate water allocation methodology, for the determination of adequacy of water facilities and services necessary to support a proposed development.

2.4.2 Evaluation and Implementation Matrix

The following Land Use Evaluation and Implementation Matrix (EIM - see

next page) was prepared as a measurable summary of the above Land Use Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific Land Use programs
- as a tool for further developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

BS Building and Safety
CA City Attorney
CM City Manager
CP Community Planning and Development
ED Economic and Urban Development
FN Finance
PW Public Works

Other Agencies/Jurisdictions

CC Clark County
Hend City of Henderson
LVVWD Las Vegas Valley Water District
NLV North Las Vegas
RTC Regional Transportation Commission

2.4.2 LAND USE EVALUATION AND IMPLEMENTATION MATRIX					
POLICY (PROGRAM)	PROGRAM SUMMARY	RESPONSIBLE DEPT*	DATE OF IMPLEMENTATION	SPECIFIC ACTION/PRODUCT	REMARKS
A1 (A1.1)	Consider General Plan Policies and Programs in annual preparation of the City's Capital Improvement Program	All with FN	Annually	Budget line items reflecting General Plan Programs	
A1 (A1.2)	Prepare biennial review of General Plan for Planning Commission and City Council	CP	1993	Program to evaluate Implementation progress; Updated General Plan	Continue CAC as oversight/steering committee; Coordinate with TAC
B1 (B1.1)	To ensure efficient utilization of water supply, prepare Existing Land Use Maps and calculate potential buildout capacity (population) on vacant land parcels	CP	1992	Existing Land Use Maps by Sector; buildout projections (Population)	
B1 (B1.2)	Determine boundaries for "infill" designated areas, considering Water District pressure zones	CP, PW, LVWD	1992	Map, superimposed on Future Land Use Plan	
B1 (B1.3)	Continue to monitor the water issue to remain aware of new conservation methods and potential supply sources	CP, PW, LVWD	Ongoing	Regular report, ordinance revisions	
B2 (B2.1)	Establish and implement guidelines for infill development	CP, PW	1992	Policy guidelines adopted by City Council	
B2 (B2.2)	Consider providing an incentive program for infill development	CP, PW	1992	Study to determine benefits of incentive program	
C1 (C1.1)	Define and designate urban, suburban, and rural residential areas on Land Use Plan	CP	1992	Future Land Use Plan	
C1 (C1.2)	Designate specific low density, equestrian/agricultural, residential land use districts	CP	1992	Future Land Use Plan	
C1 (C1.3)	Plan for appropriate location of multiple family residential uses throughout the City	CP	1992	Future Land Use Plan	
C1 (C1.4)	Require multiple family developments to be compatible with adjoining single family uses	CP, BS	1992	Development standards; Revised Zoning Ordinance requirements	Integrate with neighborhood scale land use plans
C1 (C1.5)	Develop standards for mobile home developments to ensure compatibility with adjoining residential uses	CP, BS	1992/93	Development standards; Revised Zoning Ordinance requirements	Integrate with neighborhood scale land use plans
C2 (C2.1)	Emphasize planned commercial centers, rather than strip commercial development	CP, ED	1992/93	Study/report on location of commercial development	Integrate with neighborhood scale land use plans
C2 (C2.2)	Develop and incorporate commercial service area standards	CP, ED	1992/93	Study on commercial development (review standards of successful cities)	Integrate with neighborhood scale land use plans
C2 (C2.3)	Develop a low intensity Office land use category as a transitional use	CP	1992	Revision to General Plan and Zoning Ordinance	
C2 (C2.4)	Develop a high intensity Office land use category	CP	1992	Revision to General Plan and Zoning Ordinance	
C3 (C3.1)	Designate locations for specific Activity/Employment/Service Centers	CP	1992/93/94	Revision to General Plan	Integrate with neighborhood scale land use plans

*Note: First entry denotes lead dept. See previous page for explanation of abbreviations

Land Use

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2.4.2. LAND USE EVALUATION AND IMPLEMENTATION MATRIX, continued					REMARKS
POLICY (PROGRAM)	PROGRAM SUMMARY	RESPONSIBLE DEPT*	FY OF IMPLEMENTATION	SPECIFIC ACTION/PRODUCT	
C3 (C3.2)	Provide incentives for Activity/ Employment/Service Center development	CP, ED	1992	Study/report	
C3 (C3.3)	Implement the Downtown Development Plan as the primary Activity Center of the City	ED, CP, PW	1992/93/94	Phased development plans; Access to Union Pacific parcel; Clark City Off. Main St. Sta.	Integrate with neighborhood scale land use plans
D1 (D1.1)	Identify and prioritize neighborhoods and organizations for future neighborhood &/or corridor studies and plans	CP, ED, PW	1992/93/94	List of organizations; maps of areas	
D1 (D1.2)	Prepare a series of neighborhood &/or corridor studies and plans	CP, ED, PW	1992/93/94	Neighborhood/corridor scale studies and plans	
E1 (E1.1)	Investigate options for creative mixed use developments	CP	1992	Concept plans; ordinance revisions	Integrate with neighborhood scale land use plans
E1 (E1.2)	Investigate application of pedestrian oriented "neo-traditional" planning concepts	CP	1992	Study/report	
E2 (E2.1)	Prepare a Development Intensity Level (DIL) pilot study	CP	1992	Pilot study/report	
E2 (E2.2)	Apply the Development Intensity Level (DIL) pilot study to a City-wide program and map	CP	1993/94	Approval of DIL approach; map; development standards	
F1 (F1.1)	Develop a Valley-wide, generalized, Future Land Use Map with input of all jurisdictions	CP, CM, Hend, NLV, CC	1992	Valley-wide Land use matrices; generalized Future Land Use Maps	
F1 (F1.2)	Identify and resolve any land use conflicts along jurisdictional boundaries	CP, CM, Hend, NLV, CC	1992/ongoing	Study/report; amendments to General Master Plans; interlocal agreements	
F2 (F2.1)	Investigate the potential for formation of a Valley-wide planning association, including a Council of Governments	CP, CM, Hend, NLV, CC	1993	Study/report; community meetings	
F2 (F2.2)	Develop methods of increased inter-jurisdictional coordination of zoning, building and code enforcement	CP, BS, PW	1993	Revised ordinances	
F3 (F3.1)	Reduce overlapping, inefficient service areas through the elimination of irregular City boundaries and County "islands"	CP, CM, CC	1993	Annexation Master Plan	
F3 (F3.2)	Seek State legislation to simplify and expedite the annexation process	CP, CM	1993	Proposed legislation	
F3 (F3.3)	Prepare capital improvement plans and schedules for public facilities in conformance with the adopted General Plan proposed future land uses	CP, PW, PL, FN	1992/93/94	Evaluate proposed CIP with Land Use Plan	
F3 (F3.4)	Implement a growth management program which links land development approval with General Plan consistency and development review requirements	CP, PW, CM, FN	1993	Growth Management Program	

2.5 Future Land Use Plans

This Element addresses future land use at both the City scale and the Valley-wide scale. Proposed Future Land Use Maps have been prepared at both scales. The City scale map was developed with the same three "sectors" (Northwest, Southwest and Southeast) discussed in Section 2.1.2 on Existing Land Use. See maps 5, 6, and 7 in the following pocket sheets.

2.5.1 Sector Scale Future Land Use Plans

Northwest Sector Future Land Use Plan (Map 5). This Plan is for the generally rural/agricultural area north of Cheyenne Avenue and west of Decatur Boulevard, which is experiencing active and continuing development pressure. An interim General Plan, prepared with the assistance of the Northwest Citizens Advisory Committee, was adopted for the Northwest Area on February 20, 1991. The Interim Plan was reviewed by the General Plan Advisory Committee, and expanded in content and detail, to form the Northwest Sector Future Land Use Plan. In addition to preserving a significant amount of the rural land use designation depicted on the previous (1985) General Plan for this area, a new, lower density (0 - 2 dwelling units per acre) Desert Rural (DR) land use category was established and applied as noted.

Nodes of commercial and higher density residential land uses are designated at NDOT's proposed future locations for two of three interchanges along the US 95 segment between Centennial Parkway and Moccasin Road. This nodal development, which will help preclude the continuous strip commercial type development which has occurred in other rapidly urbanizing areas of the City, reflects major development activity which is now taking place in the Northwest Sector.

Southwest Sector Future Land Use Plan (Map 6). This Plan, for the area west of Decatur Boulevard and south of Cheyenne Avenue, features many excellent examples of "planned communities", including: The Lakes at West Sahara, Peccole Ranch, Canyon Gate Country Club, Desert Shores, South Shores, and the first phase of the extensive (ultimately 23,180 acres) Summerlin satellite new town, with its first residential "village", Sun City Summerlin. Summerlin (Map 8) has a creative and unique development process which is described in a following subsection.

Southeast Sector Future Land Use Plan (Map 7). This Plan is for the more mature area of the City east of Decatur Boulevard. It is more fully built out, and future growth in this area will consequently include more extensive "infill" development. This Sector encompasses the Las Vegas Downtown Development Plan, as depicted on Map 7 and further described in a following subsection and on Map 9.

1991 Summerlin General Plan (Map 8). Summerlin is developing under the requirements of the Planned Community (PC) District of the City of Las Vegas Zoning Ordinance, which was established to encourage the development of comprehensively planned communities with a minimum area of 3,000 acres. The PC process, which to this time has been utilized only by Summerlin, requires an overall Development Plan (Master Concept Plan), and sophisticated Development Standards. The original Master Concept Plan, for Husite as it was called at that time, was adopted by the City in 1987, with an initial annexation and rezoning of 4,561 acres. An additional 616 acres have subsequently been annexed, and the first phase "Sun City Summerlin" retirement community is now functional. An updated General Plan, as depicted on Map 8, is being adopted in conjunction with the update of the General Plan. The major change

is in the overall configuration, as an extensive western portion of the original parcel has been acquired by the BLM as a transitional buffer to the Red Rock Recreation Area to the west; and, the Plan has expanded to the south west of Hualapai Way as shown on Map 6.

More than just a large planned community, Summerlin is a satellite new town which will provide a substantial employment base. It seeks to achieve a balance between residential and employment opportunities: with an ultimate population which could range between 165,000 and 178,000, Summerlin is reserving land areas that could provide for 65,000 to 70,000 jobs in the commercial (including office), retail, recreational and institutional categories.

Las Vegas Downtown Development Plan (Map 9). This Plan for the Downtown gaming and entertainment center, which also functions as a regional commercial and office activity center, is located in the Southeast Sector, as located on Map 7. The Downtown Development Plan, which includes a development strategy for the West Las Vegas Area located adjacent to and northwest of Downtown, is, like the above Summerlin Master Concept Plan, adopted in conjunction with the update of the General Plan.

The Downtown Development Plan addresses a wide range of land functions, ranging from intense uses including the Downtown entertainment and gaming core, office and civic core, and the vacant 287 acre Union Pacific parcel planned for major mixed use developments, to low density residential preservation.

The Downtown Redevelopment Agency has identified the following activities as its highest priorities:

1. Establishing a critical mass of office and retail commercial land uses
2. Strategically locating development to generate new investment in Downtown
3. Creating a multi-purpose, 24 hour marketplace environment in the Downtown
4. Improving the Downtown linkage with the Strip
5. Enhancing the quality of the physical environment, improving the Downtown circulation system, and ensuring that adequate infrastructure is provided
6. Expanding the Fremont Street hotel/casino core
7. Encouraging more concentrated development in the office/civic core
8. Creating a stronger relationship between the office/civic core and Las Vegas Boulevard
9. Conserving existing residential neighborhoods, particularly those designated as historic areas

The intent of the Valley-wide General Plan Map is to identify:

- elements which need to be coordinated on a metropolitan (Valley-wide) scale:
 - future land uses
 - community facilities
 - circulation systems
 - infrastructure and utility systems
- areas of:
 - continuity (as positive examples), and
 - conflict (to be resolved) at the boundaries among all Las Vegas Valley jurisdictions

2.5.2 Generalized Valley-wide, Future Land Use Plan

An adopted action of the "Las Vegas 2000 and Beyond" strategic planning program was to "update the City's General Plan in coordination with the General/Master Plans of adjoining jurisdictions." Accordingly, staff researched the General/Master Plans of all contiguous Las Vegas Valley jurisdictions, and developed a Valley-wide matrix of "lowest common denominator" proposed future land use categories (see Table 5) with the input of all jurisdictions. Staff then prepared, and similarly reviewed with staff of all jurisdictions, an overall Generalized Valley-wide Future Land Use Plan Map (Map 11, found in the back cover pocket).

Land Use

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Las Vegas General Plan Land Use Element

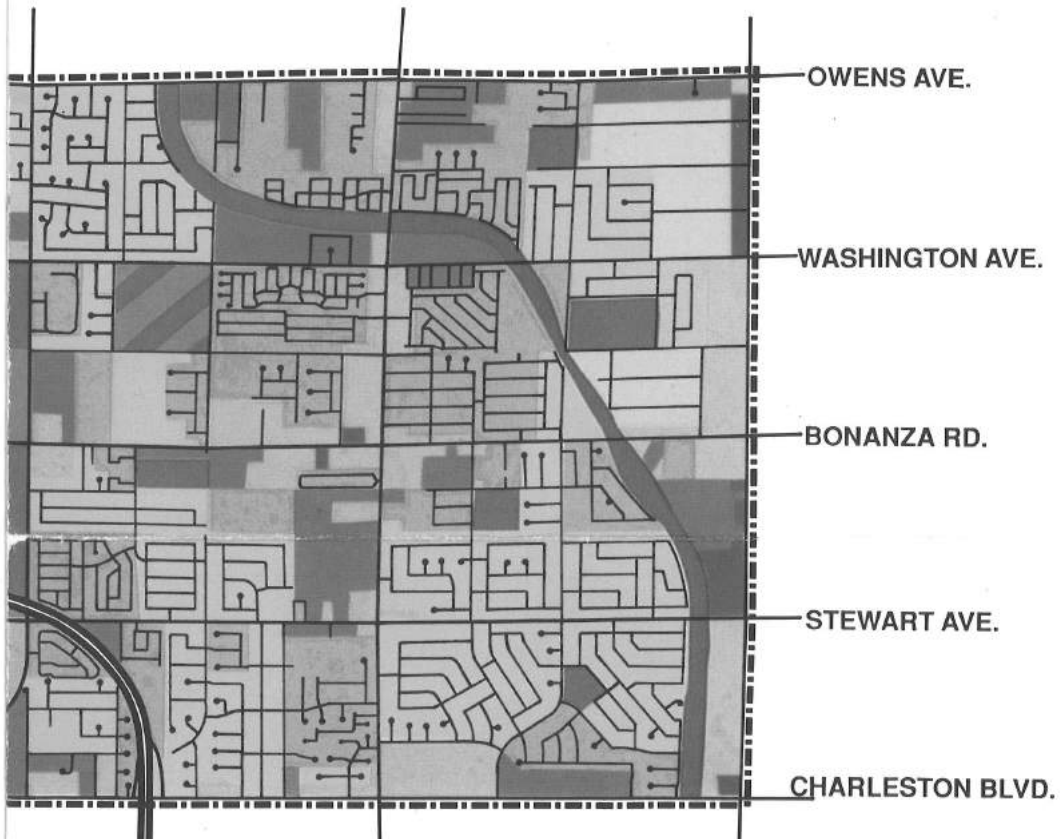
Map 7

Southeast Sector

Proposed Future Land Use

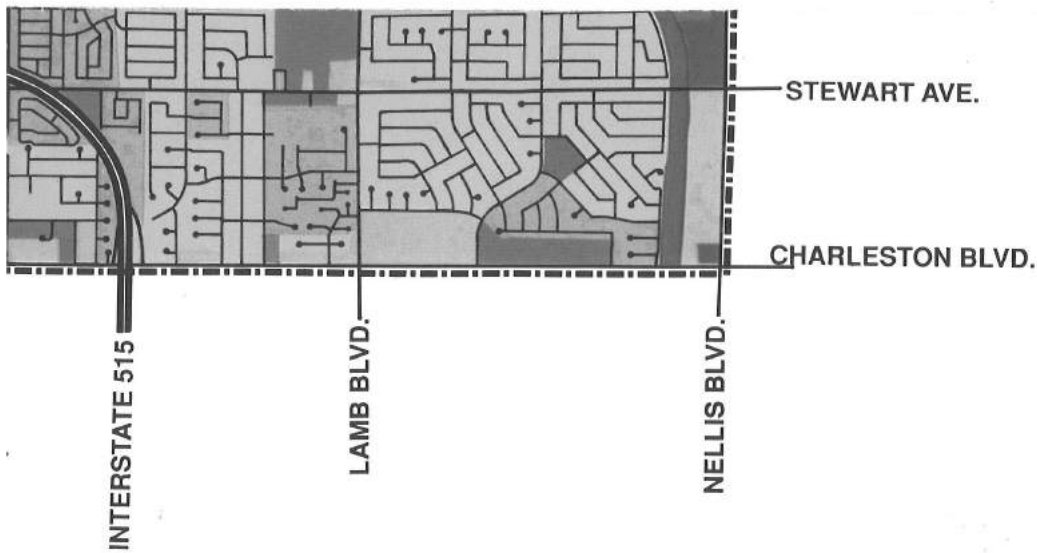


*Single Family Unit Equivalent: See Land Use Element 2.1.5 and Table 3
Source: City of Las Vegas, Dept. of Community Planning & Development



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SAHARA AVE.

BOULDER HWY.



Scale in Feet

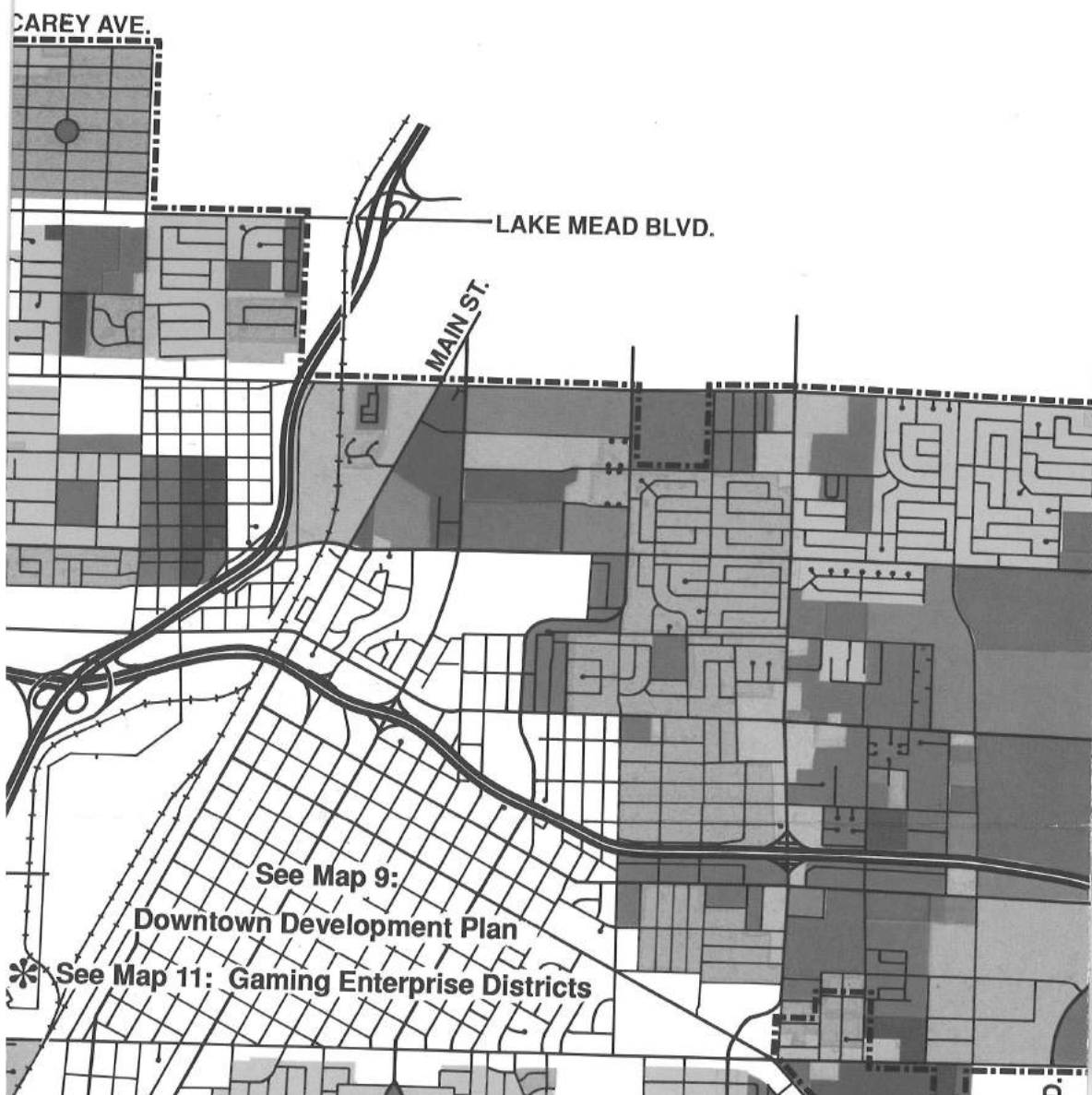
--- CITY BOUNDARIES

E CLASSIFICATION SCHEDULE

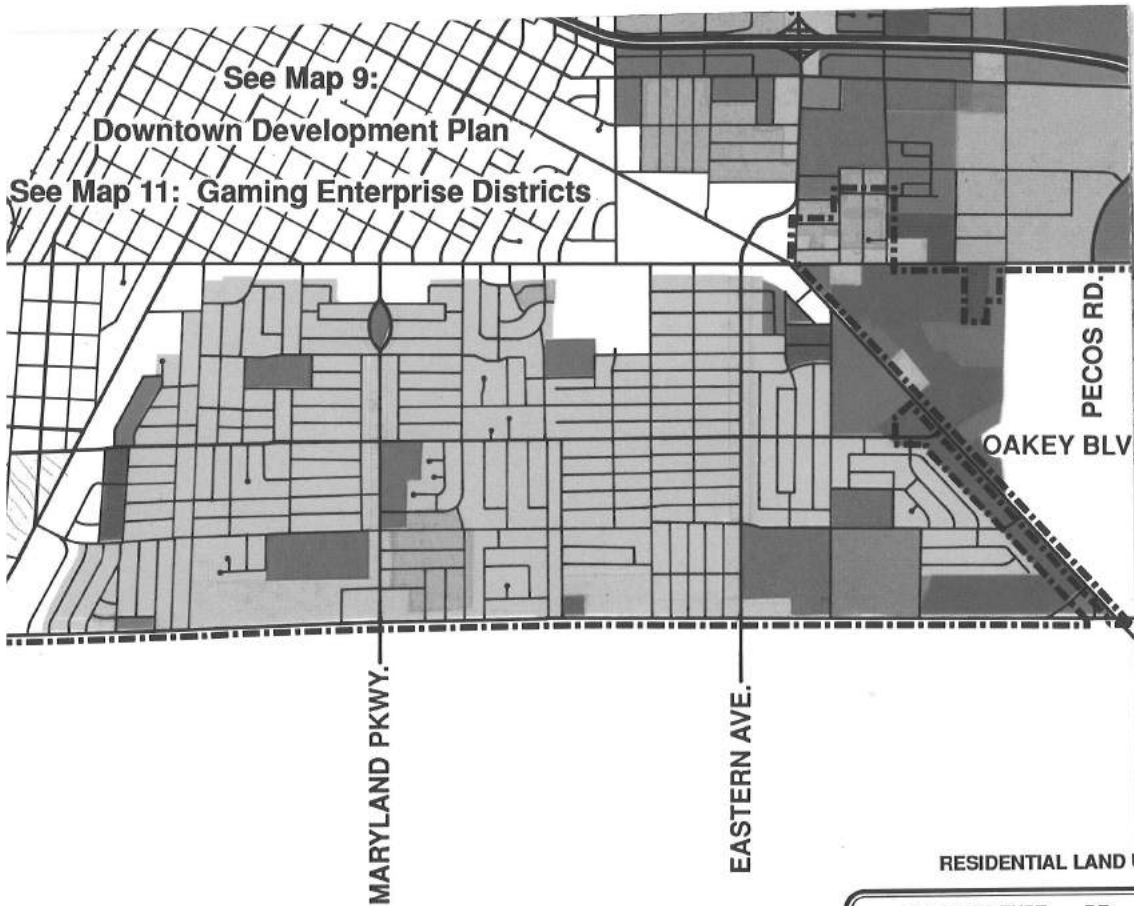
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3.96	6.70	9.00	1 .27	16.58
		13.57	20.00	25.00
	12.09	16.23	23.93	29.91
			37.23	46.52
			7.14	7.14
			20.67	25.77
			29.78	37.22
		43.08	43.08	43.06

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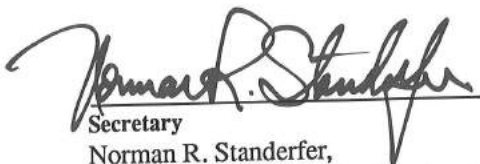


RESIDENTIAL LAND U

DWELLING TYPE	DR
SFUE*	.18
Single Family Detached	.18
Low Rise Apartment	
Single Family Attached	
High Rise Apartment	
Mobile Home	
Hotel per Room	
Motel per Room	
Congregate Care/Bed	

*Single Family Unit Equivalent

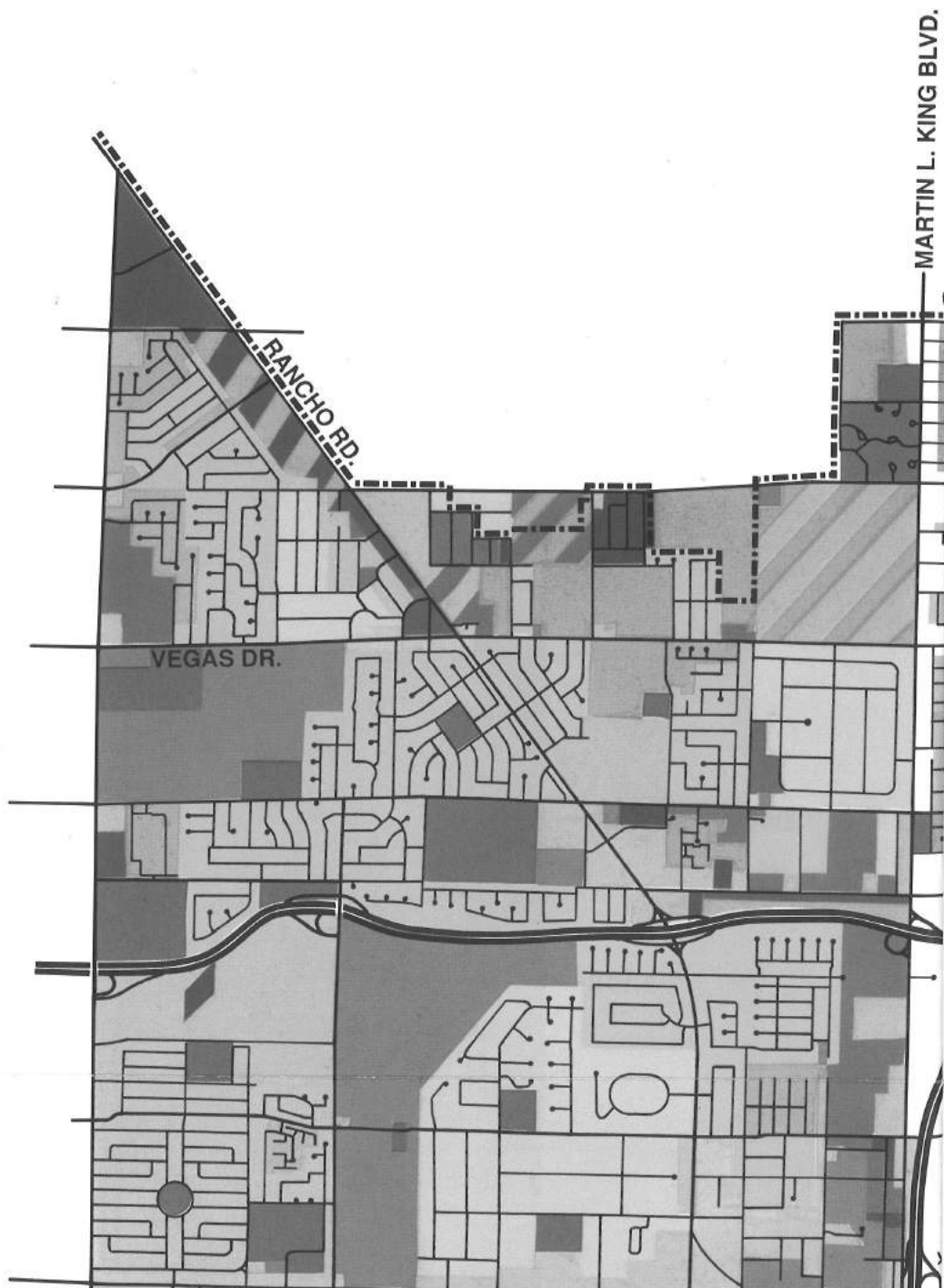
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Secretary
Norman R. Standerfer,
Director, Dept. of Community Planning &
Development

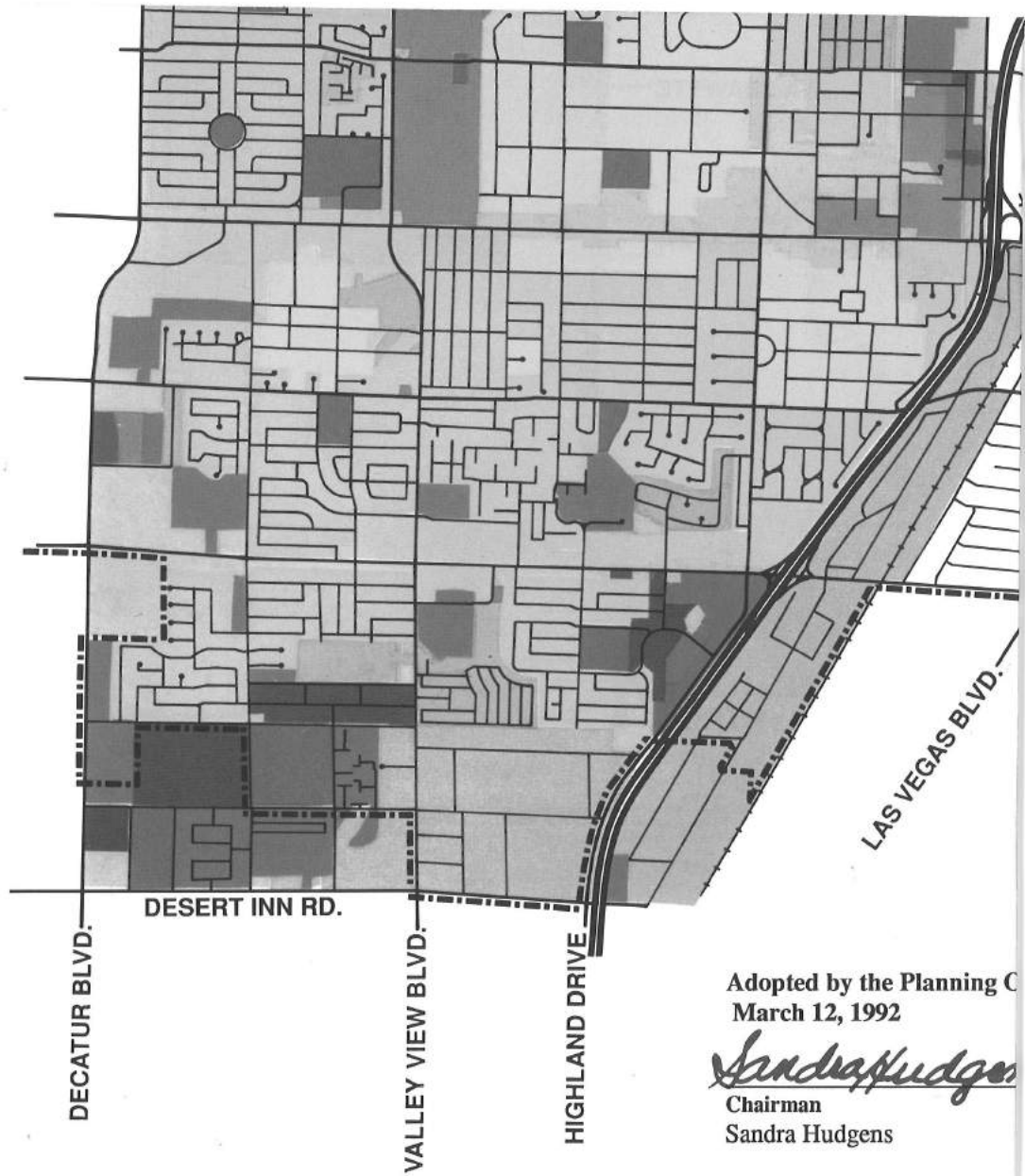
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Adopted by the Planning C
March 12, 1992

Sandra Hudgens
Chairman
Sandra Hudgens

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Land Use



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Land Use

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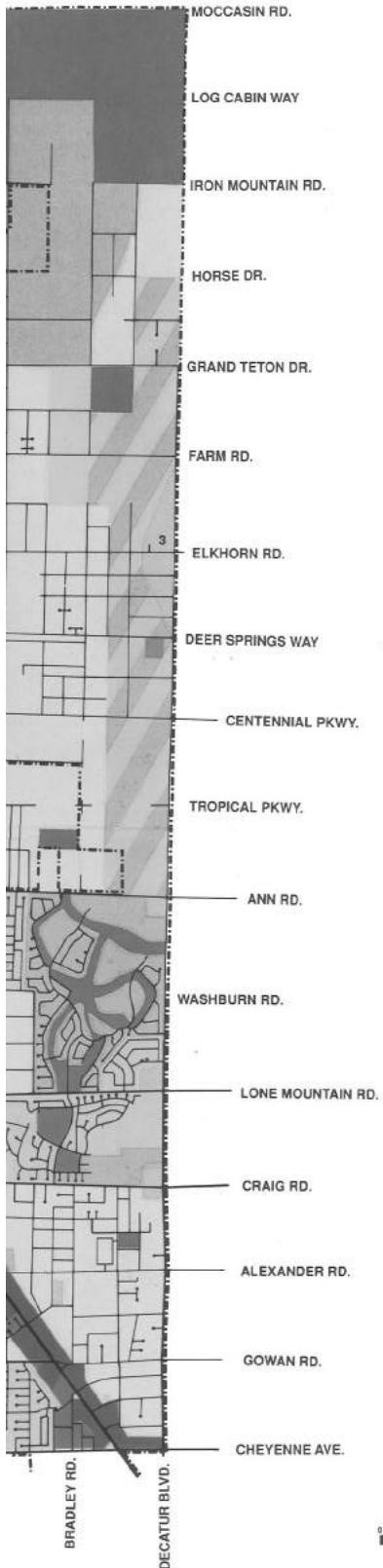
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Las Vegas General Plan Land Use Element

Map 5

Northwest Sector

Proposed Future Land Use



	Desert Rural Residential (< 2.18 SFUE/net ac.)
	Rural Residential (< 3.96 SFUE/net ac.)
	Low Density Residential (< 6.70 SFUE/net ac.)
	Medium-Low Residential (< 9.0 SFUE/net ac.)
	Medium Density Residential (< 13.27/net ac.)
	High Density Residential (<16.58/net ac.)
	Service Commercial
	General Commercial
	Tourist Commercial
	Light Industry/Research
	Parks/Schools/Recreation/Open Space
	Public Facilities
	Gaming Facilities (See Map 11. Gaming Enterprise District)

*Single Family Unit Equivalent: See Land Use Element 2.1.5 and Table 3
Source: City of Las Vegas, Dept. of Community Planning & Development

RESIDENTIAL LAND USE CLASSIFICATION SCHEDULE

DWELLING TYPE	DR	R	L	ML	M	H
SFUE*	2.18	3.96	6.70	9.00	13.27	16.58
Single Family Detached	2.18	3.96	6.70	9.00	9.00	9.00
Low Rise Apartment				13.57	20.00	25.00
Single Family Attached			12.09	16.23	23.93	29.91
High Rise Apartment					37.23	46.52
Mobile Home					7.14	7.14
Hotel per Room					20.67	25.77
Motel per Room					29.78	37.22
Congregate Care/Bed				43.08	43.08	43.08

*Single Family Unit Equivalent

Legend

	Service Commercial nodes shown are conceptual in configuration
	Planned NDOT Interchange Locations

Adopted by the Planning Commission,
March 12, 1992

Sandra Hudgens
Chairman

Sandra Hudgens

Norman R. Standerfer
Secretary

Norman R. Standerfer,
Director, Dept. of Community Planning & Development



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Scale in Feet

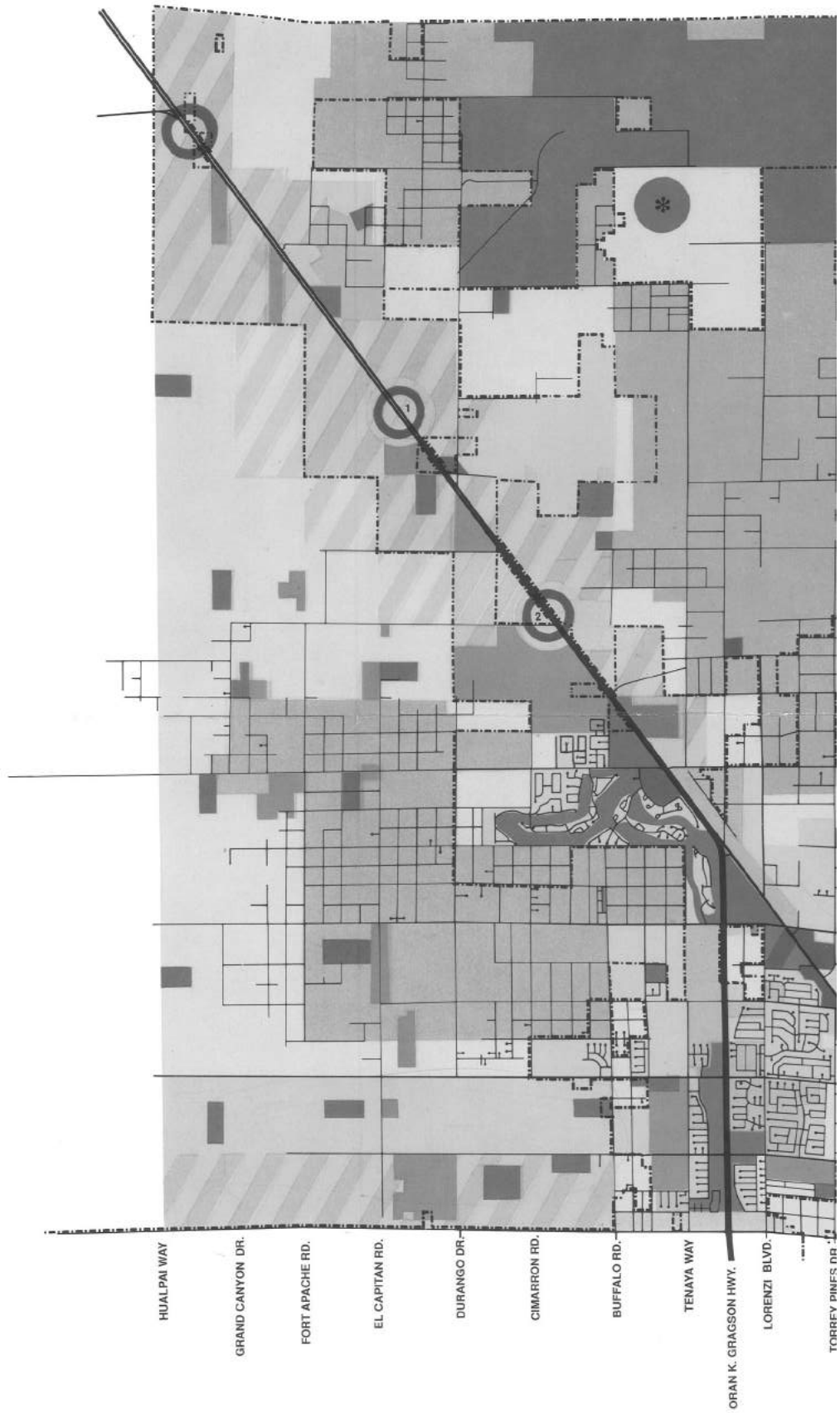
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Revised February 24, 1992

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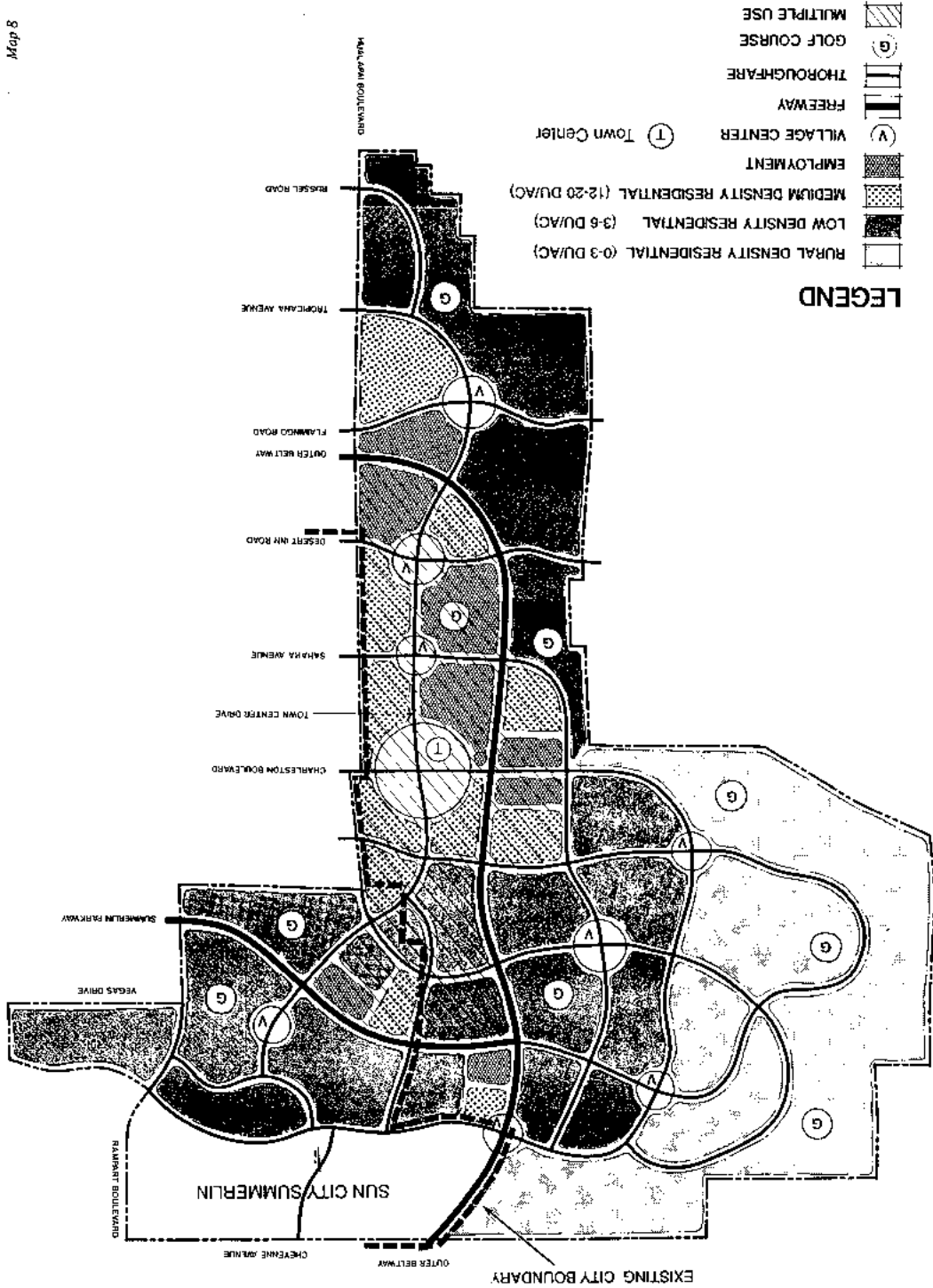
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1991 GENERAL PLAN SUMMERLIN

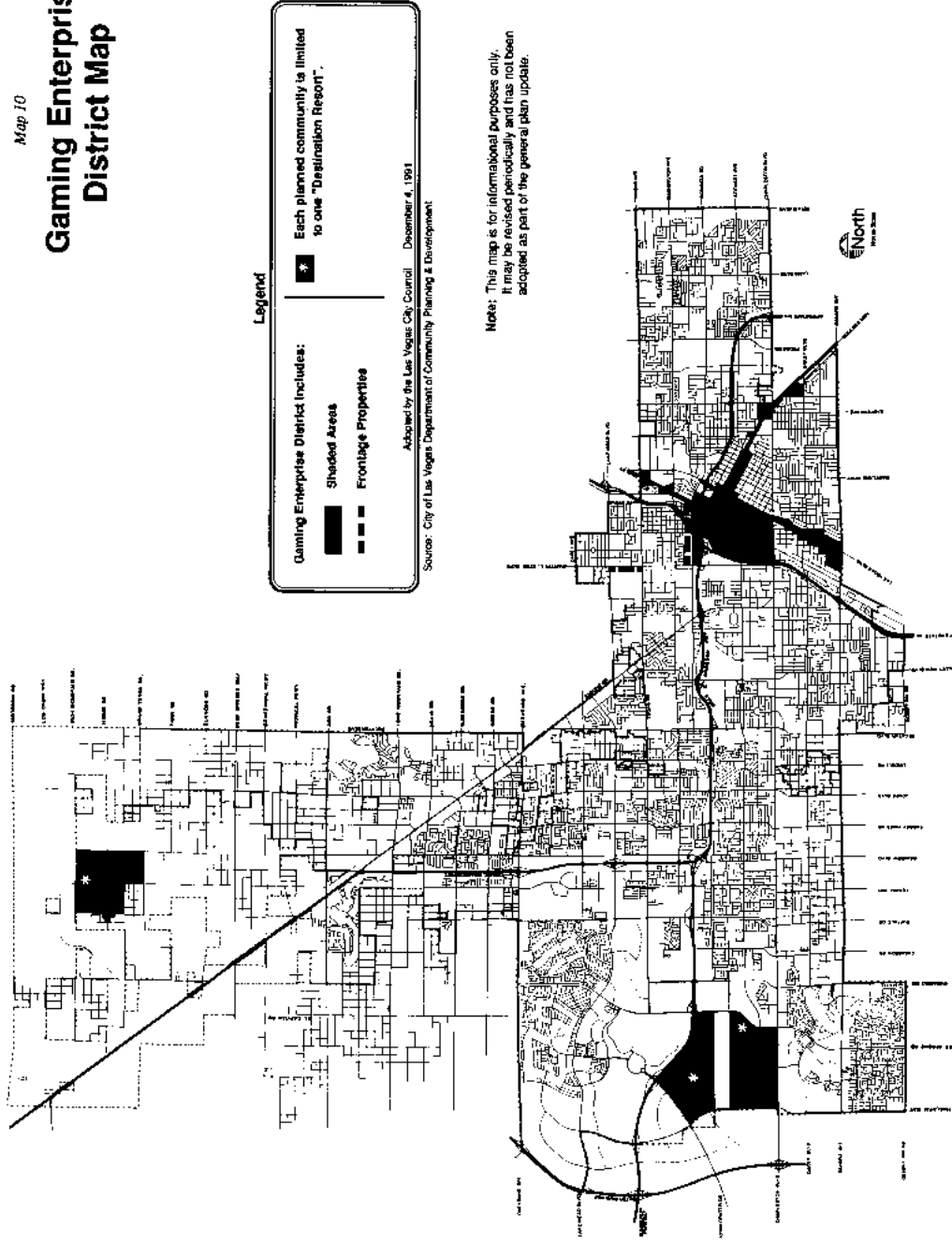
Source: Summerlin, Sunra Corporation



Map 8



Map 10
**Gaming Enterprise
 District Map**



II-207

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Table 5a

Valley-wide Proposed Land Use Categories

by Dwelling Units per Acre

	City of Las Vegas	City of North Las Vegas	City of Henderson	C L A R K C O U N T Y						Composite Valley-wide General Plan
				Enterprise	Spring Valley	Winchester	Paradise	Sunrise Manor	Lone Mountain	
Rural						Residential Rural 0 - 1	Residential Rural 0 - 1	Residential Rural 0 - 1	Residential Rural 0 - 1	Residential Rural 0 - 1
Desert Rural 0 - 2		Residential Rural < 2		Residential Suburban 0 - 2	Residential Suburban 0 - 2	Residential Suburban 0 - 2	Residential Suburban 0 - 2	Residential Suburban 0 - 2	Residential Suburban 0 - 2	Residential Rural 0 - 2
Low 3 - 6	Residential Low 3 - 6	Residential Low < 6	Residential Low 0 - 6	Residential Low 2 - 6	Residential Low > 2 - 6	Residential Low	Residential Low	Residential Low	Residential Low	Residential Low 3 - 6
Suburban 7 to 19	Residential High <= 18	Residential High 8 to 20	Residential Medium 8 to 20	Residential Medium 7 to 8	Residential Medium 8 to 18	Residential Medium up to 18	Residential Medium up to 18	Residential Medium up to 18	Residential Medium up to 18	Residential Suburban 7 to 18
Urban 20 +	Mixed Used Commercial <= 25	Residential Medium 24 - 36		Residential High 18 +	Residential High 18 +	Residential High up to 32	Residential High up to 32	Residential High up to 32	Residential High up to 32	Residential Urban 19 +

* — USE RR - 1 AND RS - 2 ZONING CLASSIFICATIONS TO DETERMINE THE LOCATION OF THIS LAND USE CATEGORY.

** — USE COUNTY R - 2 ZONING CLASSIFICATIONS TO SEPARATE TWO - FAMILY FROM THIS LAND USE CATEGORY.

GP.LU Table 5 Categories.FRpmnt 2-30-91

Table 5b

Valley-wide Proposed Land Use Categories continued										
	City of Las Vegas	City of North Las Vegas	City of Henderson	C L A R K C O U N T Y						Composite Valley-wide General Plan
				Enterprise	Spring Valley	Winchester	Paradise	Sunrise Manor	Lone Mountain	East Las Vegas
C O M M E R C I A L	.			Professional Office	Professional Office	Commercial Low (no retail)	Commercial Low (no retail)	Commercial Low (no retail)	Commercial Low (no retail)	Planned Office Commercial
	Service General Commercial	Mixed Used Commercial	Neighborhood Commercial Highway Townsite	General Commercial	General Commercial	General Commercial	General Commercial	General Commercial	General Commercial	General Commercial
	Tourist Commercial	Mixed Used Commercial	Tourist Commercial		Tourist Commercial	Tourist Commercial	Tourist Commercial	Tourist Commercial	Tourist Commercial	Tourist Commercial
I N D U S T R Y	..	Office Business Park	... Light Industrial Business Park	Designed Manufacture	Designed Manufacture	Designed Manufacture	Designed Manufacture	Designed Manufacture	Designed Manufacture	Light Industrial Business
	Employment	Industrial	Heavy Industrial	Manufacturing	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial
 Open Space	Open Space Trails Drainage	Areas Of Slopes							Parks, Schools, and Open Space
O T H E R	Public Facilities (school)		Public Semi-Public	Public Facilities	Public Facilities	Public Facilities	Public Facilities	Public Facilities	Public Facilities	Public Facilities

* -- USE THE P-R ZONING CLASSIFICATION TO DETERMINE THE LOCATION OF THIS LAND USE CATEGORY.

" -- USE THE C-P6 ZONING CLASSIFICATION TO DETERMINE THE LOCATION OF THIS LAND USE CATEGORY.

"" -- ASSIGN I-L (LIGHT INDUSTRIAL) TO THE LIGHT INDUSTRIAL/BUSINESS PARK CATEGORY.

"" -- REFER TO THE COMMUNITY PROFILE MAPS TO DETERMINE THE LOCATION OF THIS LAND USE CATEGORY.

GP-LU Table 5 Categories: FRmm/12-30-91

III. Comm. Facilities

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III. COMMUNITY FACILITIES

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Introduction

Community facilities planning consists of determining the physical components of the following sub-elements:

- Police Services
- Municipal Court Services
- Detention & Enforcement Services
- Fire Protection Services
- Education Services
- Library Services
- Leisure and Cultural Services

For planning purposes, the major concern is the number of facilities and the optimum location for each facility in order to best serve an established public purpose. The provision of community facilities is related to both the size of the area and the number of residents to be served, and is based on sets of standards developed for each of the categories. The City's Land Use Plan, which provides a guide to the location and density at which residents are to live, becomes a major determinant for community facilities planning.

As outlined in Element I, Introduction, the General Plan update process included guidance from the "Las Vegas 2000 and Beyond" citizens strategic planning program. Each of the following sub-elements includes adopted "2000 and Beyond" Actions which relate to their specific issues.

3A Police Services

3A.1 Background

The Las Vegas Metropolitan Police Department (LVMPD) handles police services for the City of Las Vegas and unincorporated Clark County. An elected Sheriff commands the LVMPD. The LVMPD is responsible for the prevention and suppression of

crime, the investigation and apprehension of offenders and the protection of residents and visitors. The LVMPD is also responsible for the Civil Bureau, which prepares, serves and enforces all civil orders received from Nevada's district courts and State agencies.

Existing Inventory

LVMPD has three area commands within the City of Las Vegas in 1991. (Map 1)

To increase the efficiency of the existing police services, LVMPD plans to move and expand two of the existing police substations to more strategic service locations. The Jones/US-95 substation will be moved west to Lake Mead and Rock Springs to serve that fast growing area. LVMPD will also move the substation at St. Louis and Atlantic. The new station will be located at Pearl and Harmon, outside City limits. Both of these new facilities will be classified as "super substations", meaning that the facilities will be larger and able to service a larger population. A fourth substation is currently proposed for the Southwest Valley, although a location or time frame for its development has not been determined.

Analysis

In 1990, LVMPD employed 1,979 personnel, a 33% increase in personnel since 1980. However, during the same time span, the population for Clark County increased by approximately 60% (463,087 to 741,459). Although the LVMPD utilizes a number of factors to determine optimum staffing levels, a simplistic means of measuring personnel needs can be achieved through a comparative process based on national standards. (Table 1)

In 1980, LVMPD exceeded the national average of overall personnel per 1000 population, although they did not meet the national average of commissioned officers per 1000 population. The LVMPD fell behind in both cat-

Table 1

LVMPD Standards for Service		
Commissioned Officer Standards	1980	1990
Commissioned Officers	752	948
Officers Per 1,000 Population	1.93	1.52
National Average	2.7	2.7
Commissioned Officer Needs	302	739
Projected Commissioned Officer Needs	1995	2000
'90 National Average	2.7	2.7
Projected Personnel Needs	1,856	2,046
Total Personnel Standards	1980	1990
Total Personnel	1,483	1,979
Personnel Per 1,000 Population	3.80	3.17
Average	3.3	3.4
Personnel Needs	0	146
Projected Personnel Needs	1995	2000
'90 National Average	3.4	2,337
Projected Pers. Needs	3.4	2,576

Source: Adapted from LVMPD Personnel Summaries, June 1980 and April 1990. Population from Clark County Comprehensive Planning, July 1990. National statistics from Crime in the United States, 1980 and 1988.

GP,CF Table 1 LVMPDpm/9-25-91

egories during the ten years following 1980 due to the rapid population increase which occurred during this decade.

"Las Vegas 2000 and Beyond" Actions relating to LVMPD are:

- Establish ...level of staffing and resources dedicated to each component of the criminal justice system.
- Analyze state and local statutes and propose necessary changes.
- Enhance the current emergency delivery systems.
- Enhance all communication capabilities by incorporating technical advances.

3A.2 Issues

Issue 1: Departmental Coordination

Activities among the criminal justice components are interrelated, and therefore should remain in close proximity to affect close coordination. Automation and cooperation can reduce the amount of staff expansion needed without decreasing the effectiveness of the various criminal justice components. Automation may include networking computer systems between the three entities. A computer ticket and arrest process which allows information to be loaded by police at the scene and then read by all entities via a computer network might save all three

departments time and staff. (See also
Municipal Court Section)

Issue 2: LVMPD Circulation and Access

Street names which are duplicated or streets which have different names at various parts of the Valley can cause delays for police responses. A committee comprised of representatives from the entire Valley is presently examining this problem.

LVMPD must have access to and through all developments within the City to effectively respond to all emergency calls. Gated communities must be designed to allow police and fire response teams to access and circulate throughout the entire development.

Issue 3: Criminal Concealment

Planning principles can be implemented to reduce the ability of criminals to conceal crimes.

Building placement, lighting, and landscaping can be regulated to maximize police patrol effectiveness.

3A.3 Goal, Objectives, Policies and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Continue to support police protection services and facilities provided by the Las Vegas Metropolitan Police Department (LVMPD).

Policy A1: Support the efforts of LVMPD to provide continuous coverage and a timely and adequate response to emergency calls.

Program A1.1: Coordinate with LVMPD in matters relating to street naming and addressing.

Program A1.2: Regulate security gates installed throughout the City to ensure unrestricted access by emergency service vehicles and personnel.

Policy A2: Continue to work with LVMPD through the Fiscal Affairs Committee to seek funding for necessary services, staff and facilities, and to provide innovative and improved efforts in such fields as communications, computerization, case tracking and facility construction.

Policy A3: Support LVMPD in efforts to obtain optimal locations for necessary public facilities and substation sites throughout its service area.

Policy A4: Support LVMPD programs which provide information, training, or assistance to citizens as a means of inhibiting or curtailing criminal activity.

Program A4.1: Have the Central Action Office, in conjunction with LVMPD's Line Solution Policing Units, undertake a comprehensive code enforcement effort that specifically addresses public safety issues associated with transitional neighborhoods.

Program A4.2: Implement an improved and expanded graffiti removal program which immediately identifies and removes graffiti.

Program A4.3: Implement a policy or ordinance requiring a private security presence at large apartment complexes, mobile home parks, and motels.

Objective B: Design public and private spaces to minimize opportunities for crime and discourage criminal activity.

Policy B1: Encourage design applications for structures and associated spaces that make crime difficult to conceal and apprehension more readily achievable.

Program B1.1: Request the LVMPD's Crime Prevention Bureau to conduct defensible space reviews on applicable projects submitted to the City for development approval.

3A.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

BS	Building and Safety
CAO	Central Action Office
CC	Clark County
CP	Community Planning and Development
FD	Fire Department
LVMPD	Las Vegas Metropolitan Police Department

Other Agencies/Jurisdictions

NLV	North Las Vegas
-----	-----------------

Map 1

Police Stations/Sub-Stations

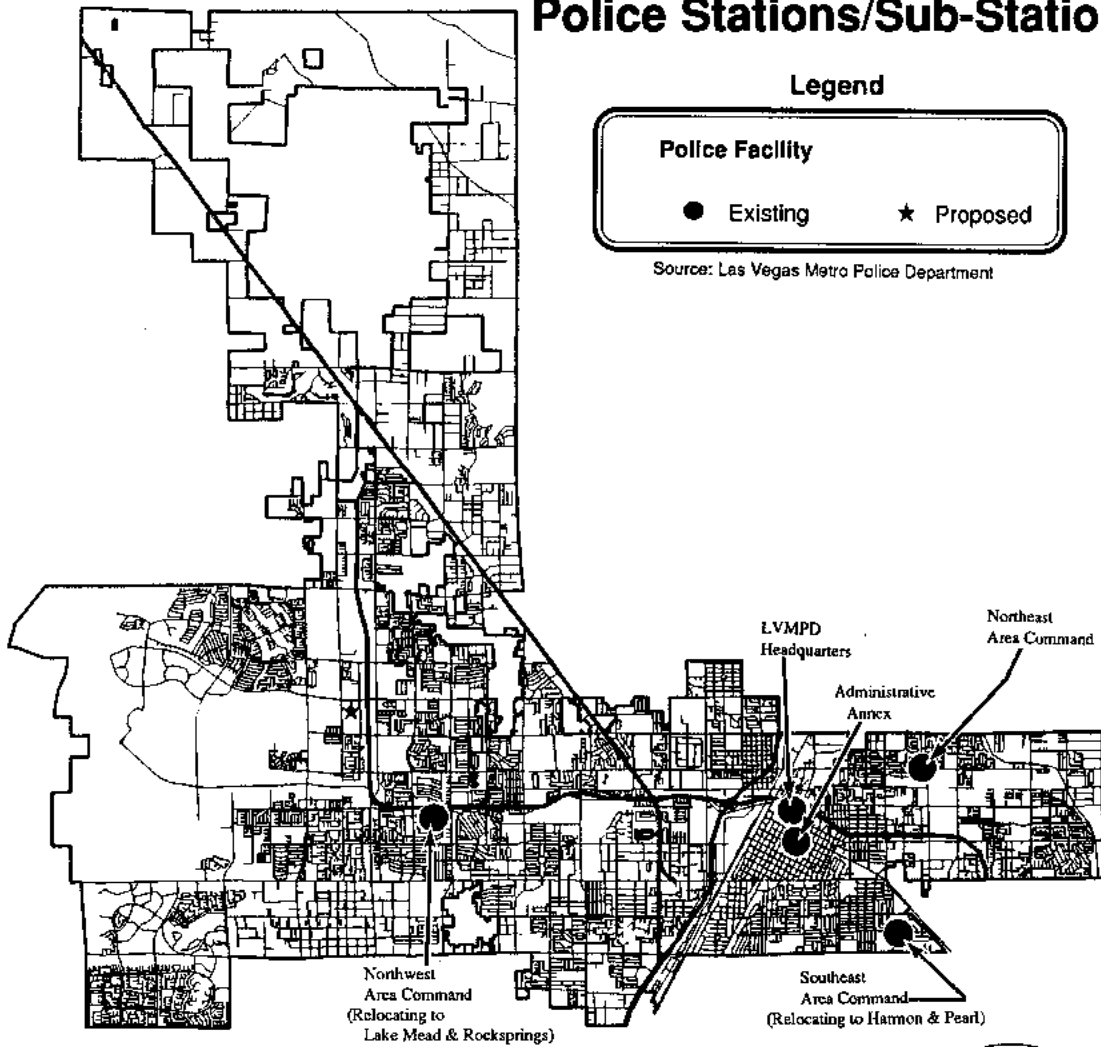
Legend

Police Facility

● Existing

★ Proposed

Source: Las Vegas Metro Police Department



May 15, 1991

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Geographic Information System



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EVALUATION AND IMPLEMENTATION MATRIX: POLICE SERVICES					
POLICY (PROG.)	PROGRAM SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLEM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1 (A1.1)	Coordinate with Clark County, North Las Vegas and Henderson to achieve consistency in street naming and addressing.	CP, CC, Henderson, NLV	'1992	Revised ordinance for street naming/numbering.	Intended to limit confusion and increase response times.
A1 (A1.2)	Ensure access through gated developments.	FD, CP	ongoing	Revise existing regulations	Increase response capability.
A2	Allocate proper funding to LVMPD to maximize efficiency.	Fiscal Affairs	ongoing	Study of necessary funding versus manpower and Dept. effectiveness	
A3	Help LVMPD locate stations in the City.	CP, LVMPD	ongoing	General Plan and Updates	
A4 (A4.1)	Code enforcement effort that addresses safety issues	BS, FD	ongoing	Revise code to emphasize safety	
A4 (A4.2)	Graffiti removal program	CAO	ongoing	Monitor removal of graffiti	
A4 (A4.3)	Ordinance requiring security personnel for large complexes.	CP	'1992	Study needed to determine effects on housing prices.	
B1 (B1.1)	Defensible space reviews by LVMPD.	LVMPD, CP	'1992	Site plan review and modification as necessary.	

3B Municipal Court Services

3B.1 Background

The local judicial process is provided separately by both City and County government. The City of Las Vegas provides municipal courts responsible for adjudicating misdemeanor offenses occurring in the City. Clark County provides justice and district courts responsible for adjudicating misdemeanor offenses in Clark County's jurisdiction and gross misdemeanor and felony offenses throughout the Clark County Judicial District.

The City of Las Vegas Municipal Court Department is comprised of four divisions: Criminal Division, Traffic Division, Field Services Division and the Lower Court Counseling Division. The Criminal Division and Traffic Division are responsible for courtroom support, case records, financial transactions, and parking collections. The Field Services Division handles public safety functions such as warrant service and courtroom security. Lower Court Counseling Division directs pretrial and sentencing diversion programs. This division also administers the City of Las Vegas Traffic School.

Existing Inventory

The City of Las Vegas Municipal Courts presently operate out of four primary locations. The Main Court facility is located on the plaza level of Las Vegas City Hall. A North Court modular (trailer) facility was developed in 1989, North of and adjacent to City Hall, to handle two court departments and support staff. The Field Services Division operates in a modular facility in the same general location as the North Court. A portion of the second floor of City Hall is occupied by the Lower Court Counseling Division. The Courts also utilize space in the Desert Federal Credit Union Building on Decatur. This space is primarily used for processing

ticket payments. A Rancho/Bonanza satellite opened March 1991, for traffic school and ticket processing. (Map 2)

To alleviate the large caseload per courtroom in 1991, the City Council plans to add a sixth court, located in the North Court facility. A court tower, to be located on the north side of City Hall, is proposed to replace the existing court facilities in an effort to consolidate Municipal Court functions. The proposed court tower would be three stories and include space for ten courtrooms.

Analysis

Future facility needs for the Municipal Courts Department are assessed on the basis of four variables that determine the future caseload of the City Courts:

- population growth,
- addition of Metropolitan Police Officers on the streets,
- addition of State and Local ordinances
- aggressive Municipal Court program to bring all offenders to court

With rapid population and land growth from 1985 to 1990, the number of police officers patrolling the City had to be increased to effectively manage rising crime rates. Table 1A of the Appendix section III shows a relationship between the increase of new patrol officers, the number of cases filed, and the cases per officer. Cases per officer remains fairly constant, so the Municipal Court Department utilizes this number as one method of predicting future caseload. Tables 2A and 3A in the Appendix section III show projected future caseloads that will be handled by the Municipal Court Department.

"Las Vegas 2000 and Beyond" Actions relating to Municipal Courts are:

- Establish the Southern Nevada Criminal Justice Planning Council
- Establish ...level of staffing and

resources dedicated to each component of the criminal justice system...

- Analyze state and local statutes and propose necessary changes.
- Enhance all communication capabilities by incorporating technical advances.
- Establish the G.R.E.A.T. System - a gang drug information system.
- Establish "Smart Moves" - a primary drug and alcohol prevention program.
- Design and implement alternatives to incarceration and remove cases which can be handled outside the criminal justice system.

3B.2 Issues

Issue 1: Court Services Expanded to Include Felony Cases

Currently, the City of Las Vegas provides court services for only misdemeanor offenses. If the Municipal Court Department becomes a court of record and then facilitates jury trials for felony and misdemeanor crimes, larger courtrooms will be required to account for additional staff needed in the courtroom and the jury. The caseload for the courts will also increase, creating a need for more courtrooms and court staff. In addition, the detention facilities will need to be adapted to hold a larger, more hostile, prisoner population. Thus, modifications and/or new construction of detention facilities must occur.

Issue 2: Public Education Program

The Department of Municipal Courts stresses the need for an educational program for the public, coordinated between the LVMPD, the Department of Motor Vehicles and the Courts. The program would be intended to introduce new residents to some of the laws of the State and Las Vegas, and could aid in preventing unintentional crime.

Issue 3: Automation and Streamlining of Procedures

The Municipal Court Department can automate and streamline procedures to maximize efficiency and minimize future facility needs. In 1979, the Court introduced video arraignments to the City of Las Vegas. This process saved the City millions of dollars in transport and detention fees, as well as saving the Court and Detention Departments time and space. In 1987, the Court implemented an "Inhouse Arrest" program. The program allows selected prisoners to serve their sentences at home through the use of electronic bracelets. This program has saved the City approximately 1/4 million dollars in service costs and facility construction since its implementation.

Another consideration for streamlining court procedures, thus limiting court, police and detention facility and staff needs, includes an automated ticketed system. The system would require a coordinated effort between police, courts, detention and the Department of Motor Vehicles. The system would generally entail coding drivers licenses and creating a network computer linkage among the entities. Police would enter the data onto a computer in their car, download an information disk from the car into the network and all entities would have access to the necessary information.

3B.3 Goal, Objectives, Policies, and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Provide adequate, secure and cost-effective municipal court facilities and operations.

Policy A1: Provide municipal court facilities and services in a location and manner which afford adequate space, integration with other related functions, public security and minimal costs.

Program A1.1: Identify opportunities to combine municipal court functions and detention facilities into one complex, and to make procedural improvements to various judicial services, and administrative services.

Program A1.2: Work with LVMPD and the Department of Motor Vehicles to create an educational program that would introduce new residents of Las Vegas to laws of the State of Nevada and the City of Las Vegas.

Program A1.3: Coordinate with the Department of Detention and Enforcement and LVMPD to investigate, study, fund and implement procedures which will automate and streamline criminal justice procedures, including an automated ticketing system.

3B.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

DE Detention and Enforcement
LVMPD Las Vegas Metropolitan Police Department
MC Municipal Courts

EVALUATION AND IMPLEMENTATION MATRIX: MUNICIPAL COURT SERVICES					
POLICY (PROG.)	PROGRAM SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1 (A1.1)	Combine court and detention operations in one facility	MC, DE LVMPD	1995	Feasibility Study	
A1 (A1.2)	Create educational program for new residents.	MC, LVMPD, DMV	1995	Develop educational program which informs new residents.	
A1 (A1.3)	Streamline procedures between criminal justice components.	MC, DE LVMPD	1995	Study, fund and implement new streamlined and automated criminal justice procedures	

Court Facilities

Legend

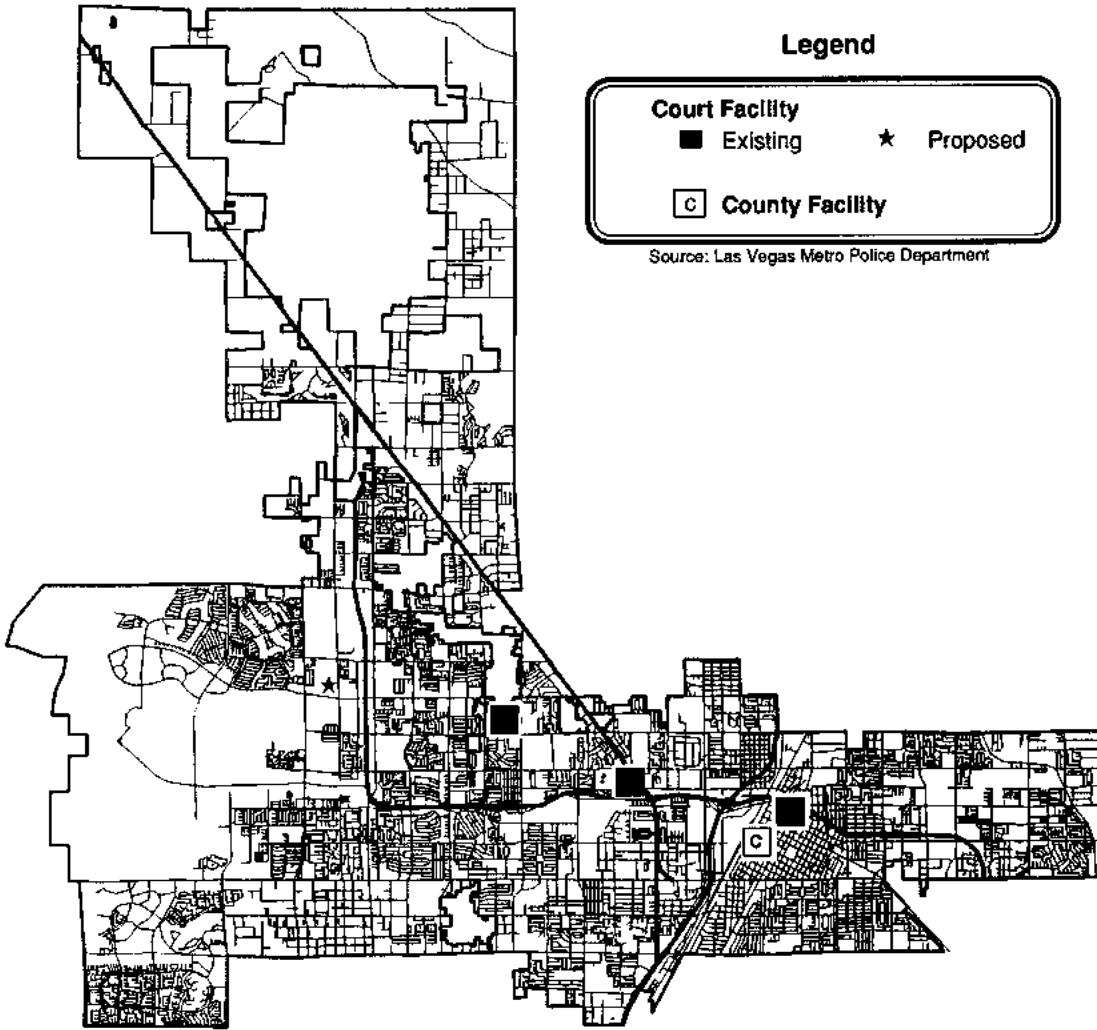
Court Facility

■ Existing

★ Proposed

□ County Facility

Source: Las Vegas Metro Police Department



May 11 1991

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Geographic Information System



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3C Detention and Enforcement Services

3C.1 Background

The City of Las Vegas is authorized by State Statute to maintain detention facilities. The Department of Detention and Enforcement accomplishes this task by delivering corrections programming services necessary for the protection of society and the correction of the offender's behavior, maintaining law and order in the parks and properties of the City of Las Vegas, and administering all vehicular non-moving violations and animal control.

The Department is comprised of three divisions:

- 1.) The Detention Services Division operates two detention facilities and provides programs to correct offender behavior, including community work programming.
- 2.) The Field Services Division consists of three units.
 - Park Ranger Unit is responsible for providing protection to park and recreation site users and any other City property users by enforcing all ordinances pertaining to use of these sites.
 - Animal Control Unit - Responsible for enforcing animal control ordinances within the City of Las Vegas.
 - Parking Enforcement Unit- Enforce non-moving violations established by City ordinances.
- 3.) The Administrative Services Division is responsible for training personnel within the Department of Detention and Enforcement.

Existing Inventory

The Detention Services Division utilizes the following facilities:

- City Hall Jail located at 400 East Stewart
- Detention Center, located at 3100 East Stewart. (Map 3)

The City plans to expand the detention facilities at 3100 East Stewart. The expansion will include a 450-bed capacity increase, a culinary unit, a visitation center, new programs and a new administration building by 1992.

The Field Services Division utilizes the following facilities:

- Detention and Enforcement Administration Building (main office)
- Downtown Transportation Center
- City Hall Complex

The Field Services Division proposes a sub-station in the West/Northwest Area of the City to decrease response times and improve the overall efficiency of the three units in the Division. Presently, the Field Services Division does not have a base for operations in the West or Northwest Area of Las Vegas.

The Administrative Division:

- Detention and Enforcement Administration Building
- Training Building at 3100 East Stewart.
- Administrative Services is also allotted space within the planned detention structure at Stewart and Mojave.

Analysis

The divisions within the Department of Detention and Enforcement analyze their needs based on a variety of variables which directly affect the level of service for each different division. The Detention Services Division determines facility needs based on the average amount of bookings per month and the average incarceration period for prisoners. Using this methodology, the Tables 4A and 5A in Appendix section III indicate that with the proposed 450-bed expansion, the City will meet its detention needs through the year 2000.

The Field Services Division determines its facility needs based on the number and locations of patrol areas, popula-

tion density, and the amount of personnel needed to accomplish future tasks. The number and location of patrol areas will determine the amount and best locations of future Field Service stations. Tables 6A, 7A, and 8A in the Appendix section III show a detailed analysis of the various Field Service Units.

The Administrative Services Division anticipates that the Department of Detention and Enforcement will grow by 40 new personnel by 1995. This represents a 27% increase in personnel, which would increase the workload for the Training and Investigations Section by 50%. Therefore, it will be necessary to increase staff for Administrative Services by four to handle the new workload. It is anticipated by the Administrative Services Division that the additional staff projected for 1995 will be able to handle the increase of workload until 2000.

"Las Vegas 2000 and Beyond" Actions relating to Detention and Enforcement are:

- Establish the Southern Nevada Criminal Justice Planning Council
- Establish ...level of staffing and resources dedicated to each component of the criminal justice system...
- Analyze state and local statutes and propose necessary changes.
- Enhance the current emergency delivery systems.
- Enhance all communication capabilities by incorporating technical advances.
- Establish the G.R.E.A.T. System —a gang drug information system.
- Establish "Smart Moves" —a primary drug and alcohol prevention program.
- Design and implement alternatives to incarceration and remove cases which can be handled outside the criminal justice system.
- Build additional jail space.

3C.2 Issues

Issue 1: Jail Expansion

The Detention Center and City Hall Jail are operating above capacity levels. The City has planned a 450-bed expansion to the detention facilities which should meet the needs of the City if the current level of service is maintained by the police, courts and detention.

Issue 2: Field Services Sub-Station

The Field Services Division proposes a sub-station in the West/Northwest section of the City to increase response times and improve the overall efficiency of the three units in the Division. Presently, the Field Services Division does not have a base for operations in the West or Northwest area of Las Vegas.

Issue 3: Field Service Activities

As the number and size of patrol areas increase, the number of field service personnel and facilities must also increase to provide adequate public safety. Levels of service should be developed and maintained to ensure adequate public safety.

3C.3 Goal, Objectives, Policies, and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Provide cost effective detention facilities, based on efficient physical design and on efficient processing and detention procedures.

Policy A1: Continue to improve the City's detention capability and need for additional jail space based on statutory requirements.

Policy A2: Provide adequate Detention and Enforcement services to the City.

Program A2.1: Find a site, fund and construct a Field Services sub-station based on requirements of each of the Units.

Objective B: Establish level of service standards for additional personnel to the Department of Detention and Enforcement.

Policy B1: Develop, adopt and maintain levels of service for Detention and Enforcement services.

3C.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

DE Detention and Enforcement

Detention Facilities

Legend

Detention Facility

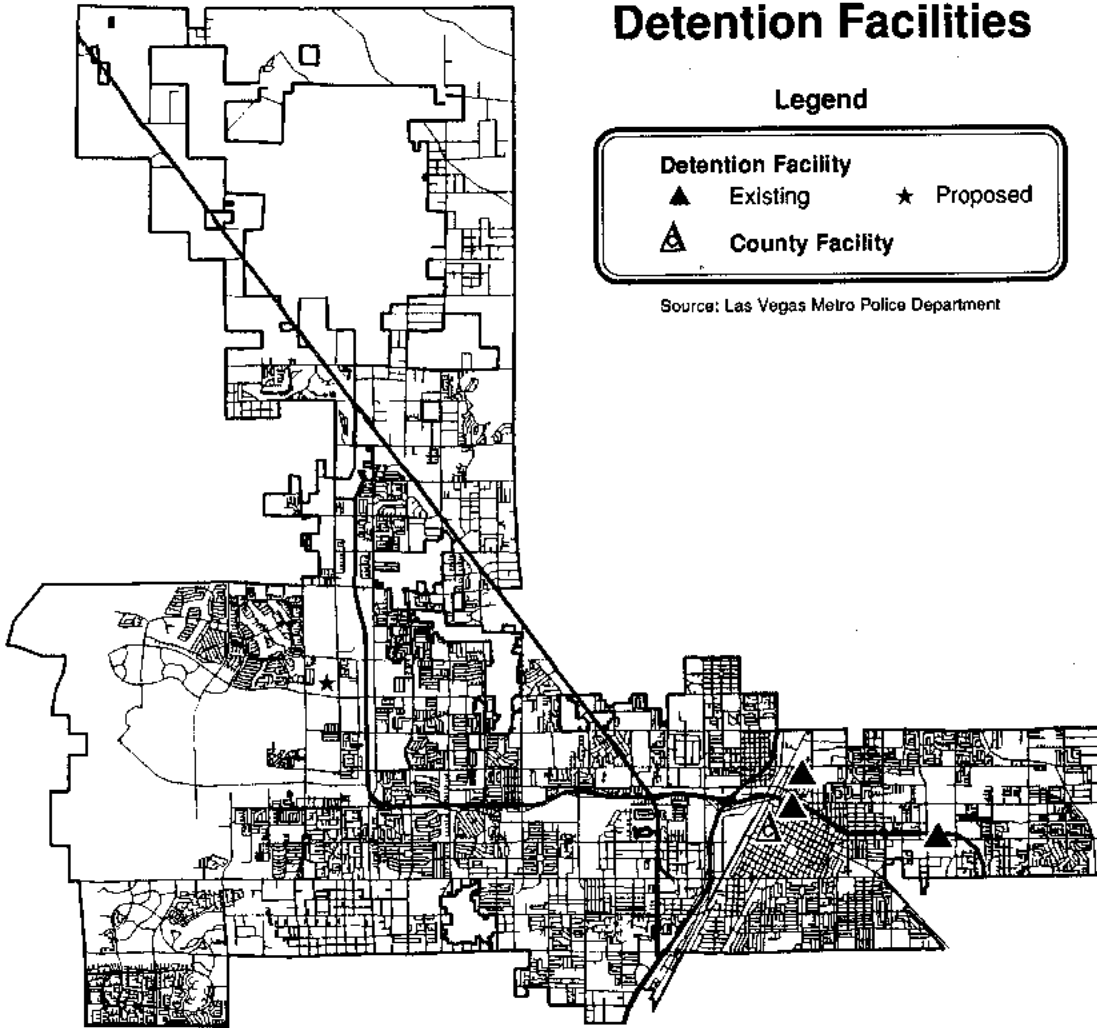
▲ Existing

★ Proposed



County Facility

Source: Las Vegas Metro Police Department



May 15, 1991

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Geographic Information System



III-10a

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EVALUATION AND IMPLEMENTATION MATRIX: DETENTION AND ENFORCEMENT					
POLICY (PROG.)	PROGRAM SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLEM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1	Improve detention capability and add jail space.	DE	1995	Study to determine space needs for inmates, then imp.	
A2 (A2.1)	Develop a Field Services Sub-station.	DE	1995	Determine location, funding, then develop.	
B1	Develop levels of service for det.	DE	1992	Develop levels of service.	

3D Fire Protection Services

3D.1 Background

The Las Vegas Department of Fire Services has developed a Fire Plan 2000 to guide the Department in accomplishing its mission. The mission, as defined in Fire Plan 2000, is "The protection of life and property by providing fire prevention, fire suppression, hazardous materials management, and emergency medical services to the City of Las Vegas."

The Las Vegas Fire Department is comprised of six divisions: Administration, Operations, Training, Fire Prevention, Support Services and Communications. In general, the divisions are responsible for planning and programming for fire prevention, enforcing fire safety standards, fighting fires, managing hazardous materials, and investigating major fires or fires of undetermined origin. The Department also maintains an emergency paramedic service. The six divisions are discussed thoroughly in the Appendix section III and in Fire Plan 2000.

Existing Inventory

In 1980, the Fire Department had nine stations which were responsible for servicing an area of approximately 57 square miles and a population of 164,674. In 1990, the Department covered an area over 82 square miles with a population of 258,295 with the same number of stations. Through strategic planning, the Department maintained effective response times during a period of rapid growth by closing three stations and relocating them to areas of higher density. These moves increased the efficiency of the Fire Department. Current fire station locations and three-minute response time service areas are plotted on Map 4 and are listed in the Appendix.

Presently, the Fire Department operates six Paramedic Rescue Units and four Paramedic Engine Companies. The Units are assigned to fire stations 1, 2, 3, 4, 5, 6, and 8.

Map 5 identifies proposed City, County and North Las Vegas Fire Stations and their service areas based on City of Las Vegas Standards.

Analysis

The Fire Department sets optimum levels of service to effectively and efficiently perform its functions. These levels of service are based on population, population densities, tourism market, land uses, site design standards and roadway construction. The Operations Division has set the following service goals and levels of service standards:

Standards of Service Goals:

- Fire fighting, rescue or extrication response within three minutes, 90% of the time; and
- Emergency medical aid within a three minute response time, 90% of the time.

Standards of Service:

1. Initial engine company response to all fire calls within three minutes, and a fire attack with charged lines, 2-1/2" in diameter within four minutes from time of dispatch.
2. Ladder company response to all fire

calls within five minutes from time of dispatch.

3. Battalion Chief responses to all fire calls within five minutes from time of dispatch.

4. Sufficient manpower on fire apparatus to provide for the safety of Fire fighters and provide the ability to perform basic fire fighting and rescue operations within one minute after arrival of the apparatus at the fire.

5. Comprehensive in-service pre-plan fire inspections and systems training program in all first-in and second-in response districts.

6. Comprehensive school drill programs in all public schools within the City.

In 1990, the Fire Department had 289 fire suppression personnel. This equates to approximately 1.12 fire suppression personnel per 1,000 population. (Table 2) In comparison, the average fire suppression personnel to population ratio for the Southwest/Central area of the U.S. is 1.67 (Baseline Data Report, 1987). The Fire Department would require an additional 142 fire suppression personnel to meet the SW/Central U.S. average.

The Fire Department earned a Class 1 rating by the Insurance Service Office (ISO) in spite of operating below the average personnel totals of other

Table 2

Fire Protection Facilities Suppression Personnel Needed			
To Meet Current Level of Service	1990	1995	2000
Supp. Personnel/1000 Pop.	1.12	1.12	1.12
Suppression Personnel	289	363	437

Source: CLV Fire Dept.

GP.CF Table 2 Fire Suppression PM p.m/9-9-91

* All response times are measured from the time the company leaves the station until they arrive on the scene.

Southwest Cities. This is the highest and most prestigious award given by the ISO for rating fire suppression capabilities and facilities nationwide. Las Vegas is one of only nine cities across the nation to qualify for ISO Class 1. The ISO rating is based on response capabilities, the alarm facility and notification, number of apparatus, personnel and equipment, training and water supply system. The insurance industry utilizes this rating to set insurance premiums for the community. The Class 1 rating assures Las Vegas citizens the lowest fire insurance premiums.

The Fire Department determines its service area radius based on population densities. The following standards are used to determine service areas.

<u>Density</u>	<u>Service Radius</u>
Low (rural residential)	5-mile radius
Medium (suburban mixed-use area)	3-mile radius
High (downtown)	1.5-mile radius

The density of the population creates a major impact on the ability of the Fire Department to effectively service an area. Higher density areas require more equipment and personnel to service a greater number of structures. The high density areas also present an increased risk of fires spreading due to the close proximity of the buildings in these areas. Placing pockets of high density development in areas previously planned for low density residential contributes to inefficient fire service capabilities. The Fire Department is faced with the option of over-serving the rural areas surrounding the development at a high cost, or inadequately serving the high density pocket, while maintaining a proper level of service for the low density surroundings.

Automatic Aid Agreements

The City has automatic aid agreements with the Clark County Fire Department and North Las Vegas Fire Department.

Under this agreement, the boundaries between entities are ignored and the closest fire station to the emergency is dispatched, regardless of which entity experiences the emergency. The total resources of the agencies are available to each entity should a large emergency occur.

The City's Fire Department assumes responsibility for all responses to fires and emergencies occurring within County areas which are completely surrounded by City Boundaries (County Islands). Services are maintained by the City and appropriate taxes from the area are released to the City from the County.

"Las Vegas 2000 and Beyond" Actions relating to Fire Protection are:

- Enhance the current emergency delivery systems.
- Enhance all communication capabilities by incorporating technical advances.
- Increase frequency and quality of fire inspection.
- Educate public, builders and policy makers on fire prevention methods.
- Provide an adequate state of readiness commensurate with the fire problem in the community.

Certain areas of the City are adequately serviced by Clark County and North Las Vegas. These areas do not need duplicated fire services from the City. Map 5 shows areas where Clark County and North Las Vegas service areas cover portions of the City.

Issue 2: Access and Circulation

The Fire Department must have access to and through all developments within the City to effectively respond to all emergency calls. Therefore, gated communities must be designed to allow police and fire response teams to access and circulate throughout the entire development.

Street names which are duplicated or streets which have different names at various parts of the Valley can cause delays for emergency response teams. A committee comprised of representatives from the entire Valley is presently examining this problem.

3D.2 Issues

Issue 1: Facilities and Land Use

By developing pockets of intense development away from the downtown core of the City, the effectiveness of the existing fire fighting facilities will decrease. In effect, the development of high density uses in rural areas leaves a choice of over-serving a rural area or inadequately serving the high density development.

3D.3 Goal, Objectives, Policies and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Provide protection of life and property by providing efficient and effective facilities and services for fire prevention, fire suppression, hazardous material control, and emergency medical care.

Policy A1: Provide protection of life and property to the City of Las Vegas through effective planning and management for the City's Fire Services facilities.

Policy A2: Provide a professional department leadership planning function which ensures that all facets of mutual and local cooperative agreements are met and maintained.

Program A2.1: Establish, monitor and evaluate departmental goals and objectives for facilities and services on an annual basis.

Program A2.2: Annually develop, implement and update operations and planning in conjunction with "FIREPLAN 2000".

Policy A3: Reduce the severity of fire or emergency situations through an effective code enforcement program.

Program A3.1: Conduct inspections of all new construction job sites to ensure that the construction of fire safety items are in conformance with approved plans and that all new fire protection systems are installed and tested in compliance with all fire codes, standards, and ordinances.

Program A3.2: Conduct inspections of all occupied buildings on an "as-needed" basis, inspect all businesses applying for a business license, and act on all complaints or requests from the public.

Program A3.3: Conduct inspections/evaluations, issue appropriate permits and maintain records on all facilities that store, use or manufacture hazardous chemicals and or materials.

Policy A4: Improve all communication and mapping capabilities by incorporating technical advances of the Geographic Information Systems (GIS) of the City and County.

Policy A5: Minimize confusion through proper site design and street naming to facilitate emergency access of fire vehicles.

Program A5.1: Establish a set of design standards mutually acceptable to the police, fire, and planning agencies to facilitate emergency access.

3D.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

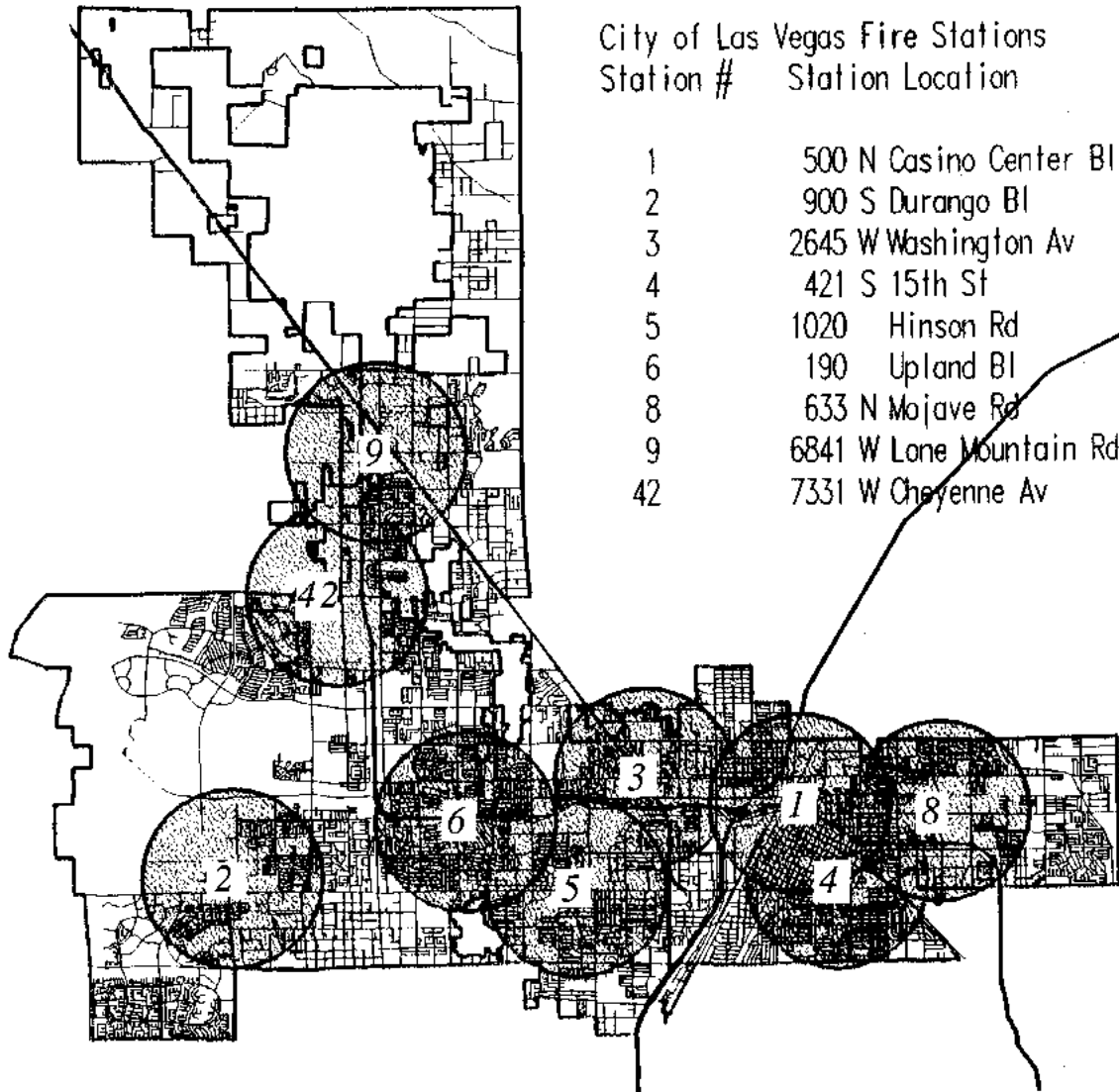
- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

CP	Community Planning and Development
FD	Fire Department
LVMPD	Las Vegas Metropolitan Police Department

Current Fire Station Locations with 3 Minute Response Areas



Produced by City of Las Vegas
Geographic Information System



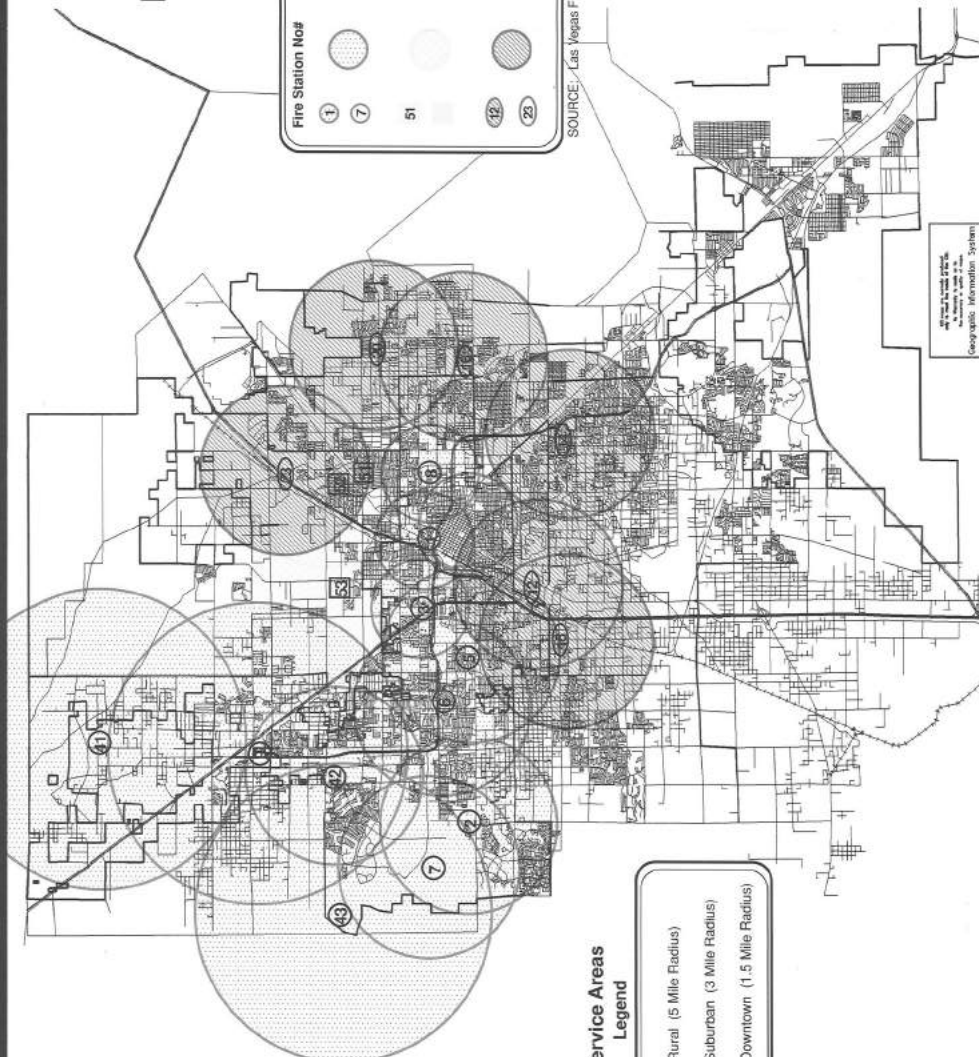
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Map 5

Fire Stations



Legend

Fire Station No#	Municipality
1	City of Las Vegas (Existing)
7	(Proposed)
51	City of North Las Vegas (Existing)
	(Proposed)
42	Clark County (Existing)
23	(Proposed)

SOURCE: Las Vegas Fire Department

Service Areas Legend

	Rural (5 Mile Radius)
	Suburban (3 Mile Radius)
	Downtown (1.5 Mile Radius)



Scale: 1" = 10521'
June 17, 1991



Produced by: City of Las Vegas, Nevada
Geographic Information System
III-14B

CLV053061
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EVALUATION AND IMPLEMENTATION MATRIX: FIRE PROTECTION SERVICES					
POLICY (PROG.)	SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1	Continue to plan and manage the City's fire services.	FD, LVMPD	ongoing	Fireplan 2000 and Gen. Plan	ISO rating of 1.
A2 (A2.1)	Est., monitor and evaluate	FD, LVMPD	ongoing	Fireplan 2000 and Gen. Plan	
A2 (A2.2)	GOPP's on an annual basis. Long-term and short-term plans along with Fireplan 2000.	FD, LVMPD	ongoing	Fireplan 2000 and Gen. Plan.	
A3 (A3.1)	Inspect new construction for fire code violations.	FD	ongoing	Schedule and inspection criteria.	quality and safety standard for new development
A3 (A3.2)	Inspect occupied structures as needed.	FD	ongoing	Inspection program	
A3 (A3.3)	Thoroughly inspect hazardous materials handlers.	FD	ongoing	Inspection and report on results.	
A4	Use GIS	FD and CP	ongoing	Technical advance.	used in some applications
A5 (A5.1)	Coordinate street naming, addressing, and proper site design.	FD, LVMPD, CP other communities	ongoing	Revise ordinance for street naming/numbering.	

3E Education Services

3E.1 Background

Educational services in Las Vegas for students in kindergarten through twelfth grade are provided primarily by the Clark County School District. The School District is responsible for providing these services to all of Clark County. Jurisdictional boundaries of the various municipalities do not play a part in the School District's efforts to provide educational services. District zoning is the determinant factor of school service areas. The zone where a student lives determines what school he will attend. Therefore, a zone may include students from more than one local government. Because of this, it is impossible to assess the education delivery system in Las Vegas without analyzing the entire Las Vegas service area. (Map 6A-F)

Existing Inventory

In school year '91-'92, the Clark County School District provided 143 schools within the Las Vegas attendance area. The Las Vegas attendance area does not include Henderson,

Boulder City, Laughlin, Moapa Valley, Virgin Valley, Indian Springs, and rural schools. (Table 3)

Clark County School District proposes 17 additional elementary schools, 8 junior high schools and 4 senior high schools through 1995 for the Las Vegas Attendance Area. Presently, the schools are not designated to be located within the City of Las Vegas. If the City reaches its projected population in 1995 and 2000, it will be necessary to locate elementary schools within the City to service the newly developed areas adequately.

Analysis

In order to operate at an optimum level, elementary schools and junior high schools should be operated at 97% capacity. High schools should operate at 92% capacity. The extra space is utilized for extracurricular activities and special course needs. Using these criteria, the existing schools can serve 103,987 students. (Table 4)

The number of students that can be serviced adequately with the existing facilities can be compared to the existing and projected student enrollment


to assess the future needs of the Las Vegas area. (Table 5)

The numbers in Table 5 signify overcrowded elementary schools, junior high schools and high schools. To compensate for a lack of space within the existing schools and projected increases in student enrollment, the School District has implemented a number of programs.

The District has developed a ten year construction program, which outlines future construction of schools. The ten year construction plan takes into account current and projected deficiencies and attempts to alleviate these problems.

The District also has programs to mitigate overcrowding until permanent structures are provided. Some schools are equipped with portable classrooms which can hold an entire class of students per unit. Year round schools have been developed to allow more students to benefit from an existing school. This program breaks students into five tracks. The tracks are rotated so that only four tracks of students are serviced at a time. This allows the

Table 3

 Schools in Las Vegas Attendance Area			
Projected Schools '91-'92	Number of Schools	Avg. Capacity of Students/School	# of Students Served
Elementary Schools*	96	635	60,960
Junior High Schools	18	1,178	21,204
Senior High Schools	12	2,200	26,400
TOTAL	126	1,338	108,564
*includes 6th grade centers			
**Clark County School District also provides 8 special schools which service approx. 510 students			

Source: Clark Co. School Dist. provided school capacity figures

GP.CF Table 3 Schools; PM; pm/9-9-91

school to service approximately 22% more students than in 9 month schools.

The School District sets site criteria for determining school locations. The following is a summary of the current criteria.

Elementary Schools

- Elementary schools should be surrounded by secondary streets.
- Elementary schools should be developed on ten acre parcels or greater.
- Elementary schools have a capacity of 600 (9-month schools) to 730 (12-month schools) students.
- New elementary schools will be planned, assuming available capital funding, when developments in an area produce 200 or more students; or when existing schools reach their designated capacity.

Junior and Senior High Schools

- Junior High Schools have a capacity of serving 1704 students.
- Senior High Schools have a capacity of serving 2800 students.

"Las Vegas 2000 and Beyond" Actions relating to Education are:

- Establish the G.R.E.A.T. System

Table 4

Possible Students Served at Optimum Levels - '90-'91	
Elementary Schools*	59,131
Junior High Schools	20,568
Senior High Schools	24,288
TOTAL	103,987
*includes 6th grade centers	

Source: CCSD provided '91-'92 school enrollment projections

GP.CF Table 4 student serv;PM:pm/9-9-91

- a gang drug information system.
- Establish "Smart Moves" —a primary drug and alcohol prevention program.
- Establish "COSTAR" —an alternative high school.
- Expand latch-key/Safe-key programs, WE-CAN and pre-school programs.
- Provide alternative programs for non-college bound students and ...awareness of the Southern Nevada job Market.
- Bring education to the work place—training for small business and satellite college centers.
- Survey businesses to identify educational needs.
- Develop business/community partnership programs...
- Expand four year old kindergarten programs by using community recreational facilities.
- Expand programs which allow children to learn at their own rate.
- Develop programs for teens to stay in school and acquire needed skills.
- Support programs for continuing education.

Table 5

Projected Enrollment vs. Optimum Capacity			
'91 Projected Enrollment	Current Enrollment	Optimum Capacity	Students Above Capacity
Elementary Schools*	61,911	59,131	2,780
Junior High Schools	20,297	20,568	0
Senior High Schools	26,133	24,288	1,845
TOTAL	108,341	103,987	4,354
*includes 6th grade centers			

Source: CCSD provided '91-'92 school enrollment projections

GP.CF Table 5 Enrollment;PM:pm/9-9-91

3E.2 Issues

Issue 1: School Overcrowding

The Clark County School District currently uses year-round schools which can service 22% more students than 9-month schools to alleviate the strain of overcrowded elementary schools.

Elementary, junior and senior high schools are currently operating above permanent building seating capacities. After the development of planned elementary, junior high, and senior high schools for the '91-'92 school year, the schools are still projected to be overcrowded based on projected enrollment.

Issue 2: Joint-use Contract

The joint-use contract between the City and the School District allows maximum use of the land at minimum expense to both entities. The contract allows the City Parks and Leisure Department to use School District facilities after school hours for activities and programs.

Issue 3: School Locational Standards

School locations should address safety and access. The School District sets site criteria which address safety issues for determining school locations.

3E.3 Goal, Objectives, Policies And Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Promote the development of adequate educational facilities in accordance with City growth patterns.

Policy A1: Inform the Clark County School District of City land use and circulation plans.

Program A1.1: Encourage neighborhood planning and design which will result in minimum conflict between school sites and major traffic arterials.

Program A1.2: Coordinate with the Clark County School District in planning public education facilities in the City.

Program A1.3: Coordinate plans with the University of Nevada for the expansion of facilities, including community colleges, throughout the City.

Program A1.4: Utilize the General Plan future land use maps to assist in appropriately locating school facilities.

Policy A2: Coordinate with land developers and the School District to identify school facilities in new developments as needed.

Program A2.1: Assist the School District in strategically locating neighborhood elementary school sites.

Program A2.2: Encourage the School District to adopt quality facility designs which are aesthetically sensitive to their surrounding neighborhoods.

Policy A3: Cooperate with the Clark County School District in its efforts to seek funding for adequate educational facility funding.

Objective B: Support joint use of City and School District facilities to improve levels of community service without duplicating investment in public facilities.

Policy B1: Continue joint use of school facilities between the School District and the City.

Policy B2: Design local parks adjacent to elementary and junior high school sites, when feasible, to facilitate joint use.

Policy B3: Cooperate with the School District to identify and acquire land to develop as joint park/school sites.

3E.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

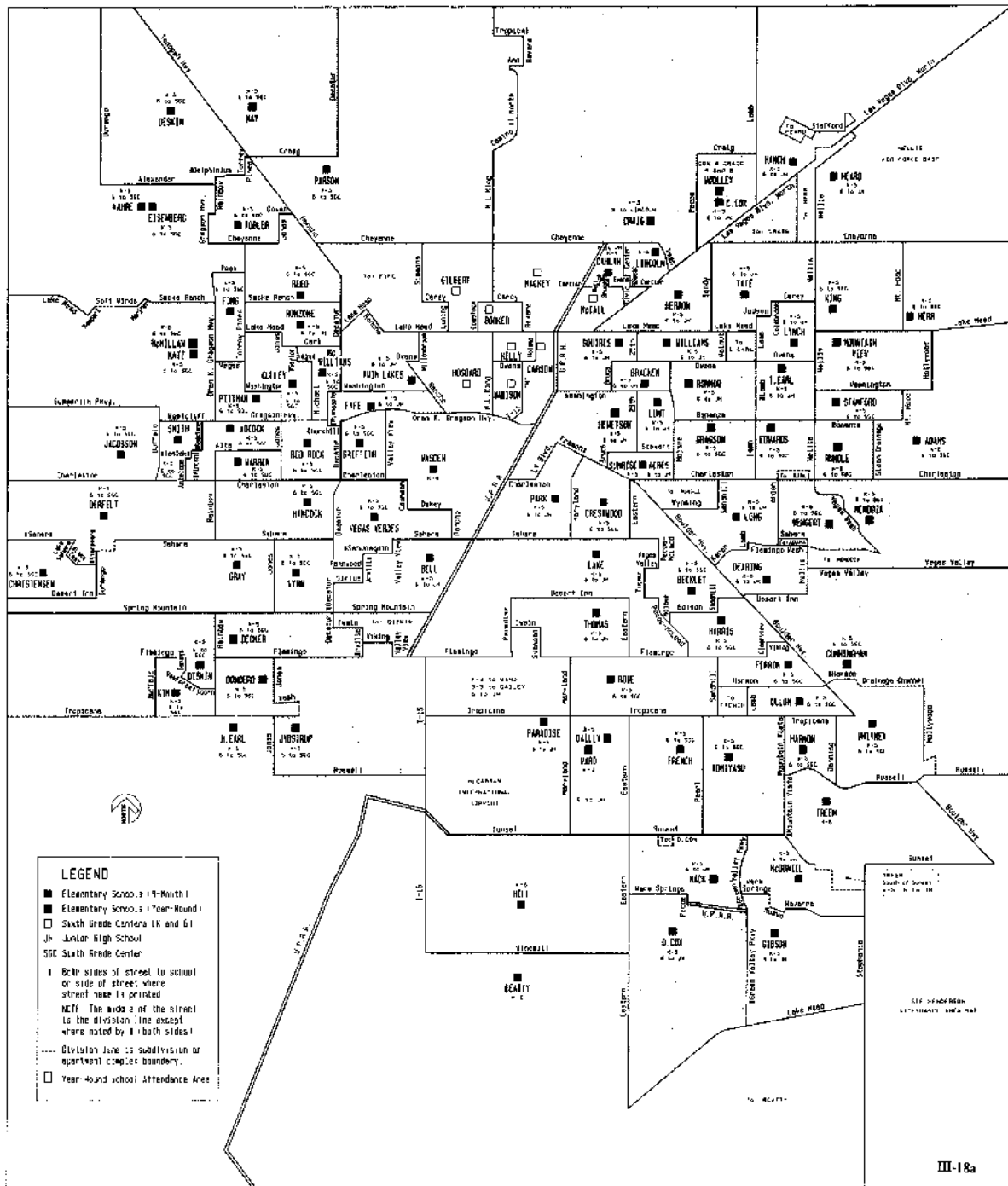
- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

CP	Community Planning and Development
CCSD	Clark County School District
FN	Finance Department
PL	Parks and Leisure

Las Vegas Valley Elementary Attendance Area 1991-92

Map 6A



FACILITIES AND TRANSPORTATION SERVICES DIVISION
DEMOGRAPHICS AND ZONING SECTION 170227 100-7572

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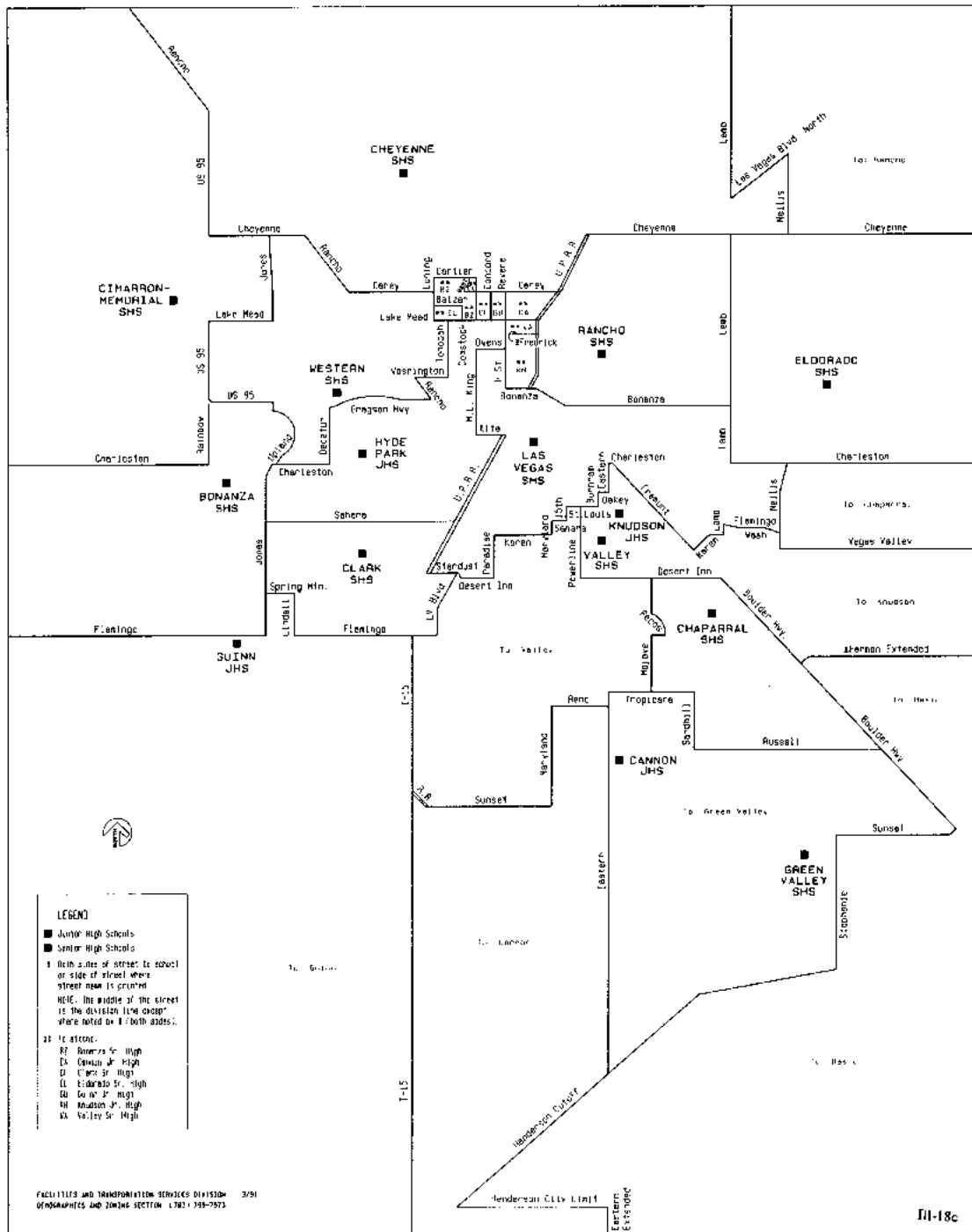
Map 6B



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Las Vegas Valley 9th Grade Attendance Area 1991-92

Map 6C



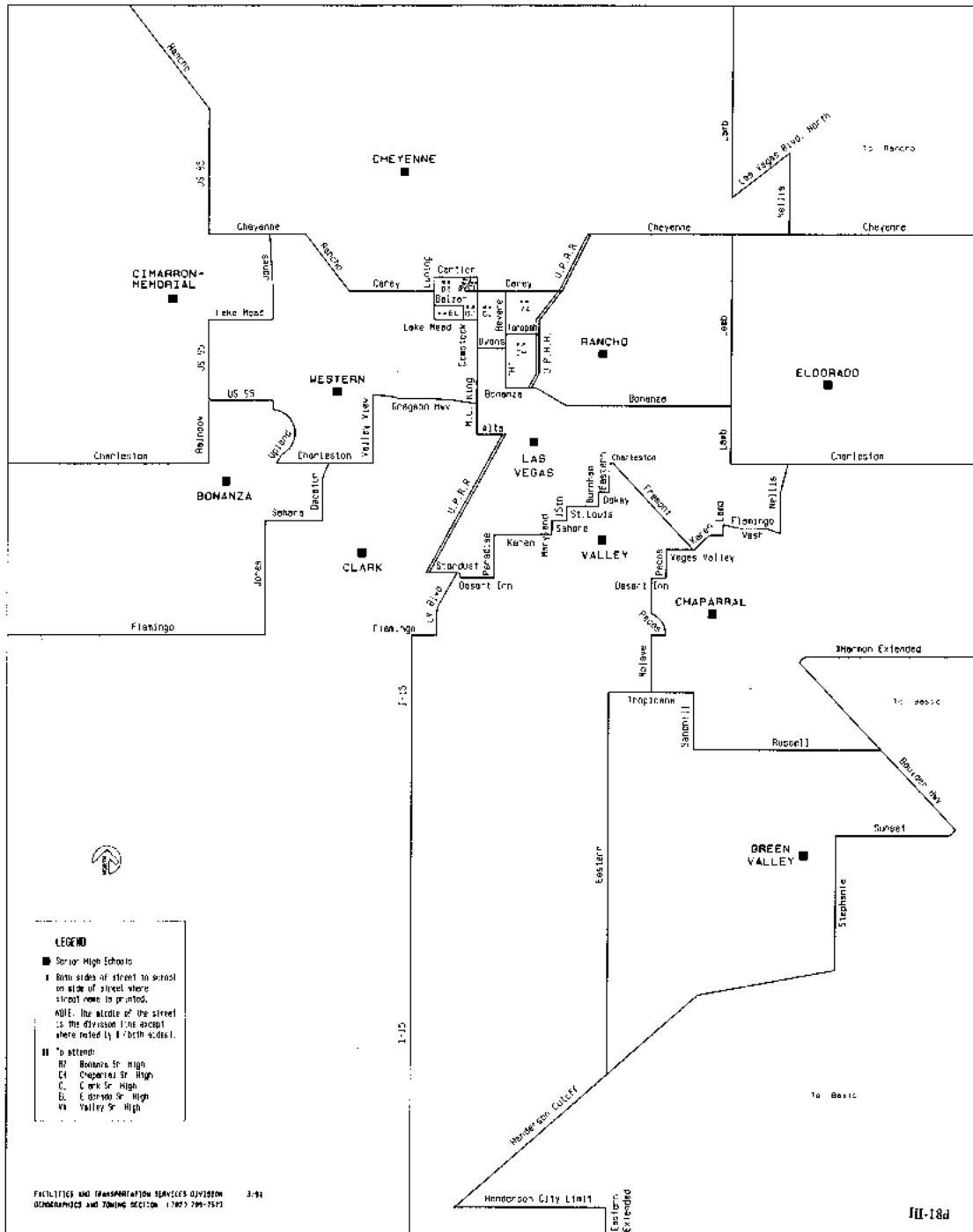
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Las Vegas Valley

10-11th Grade Attendance Area 1991-92

Map 6D

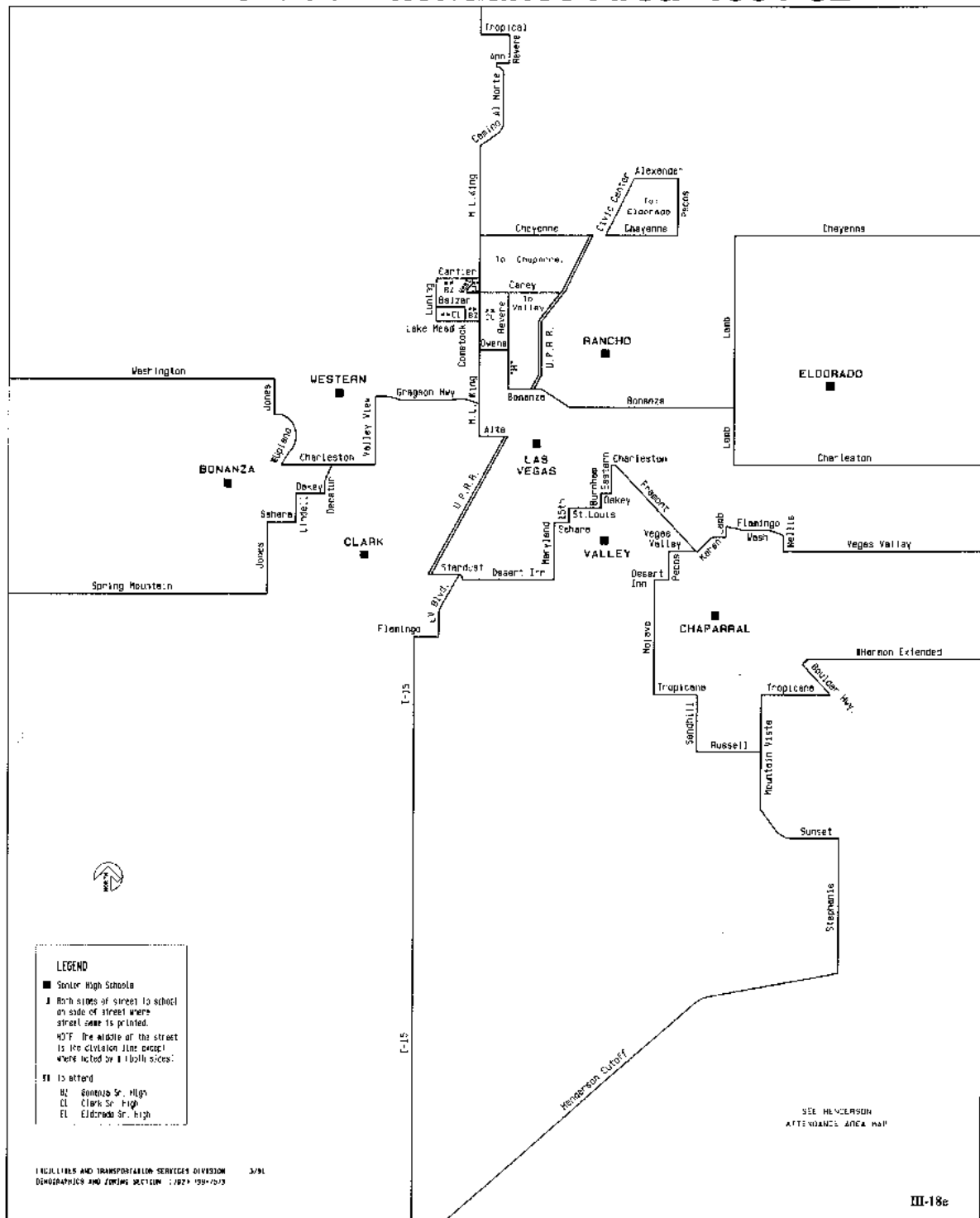


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Las Vegas Valley 12th Grade Attendance Area 1991-92

Map 6E

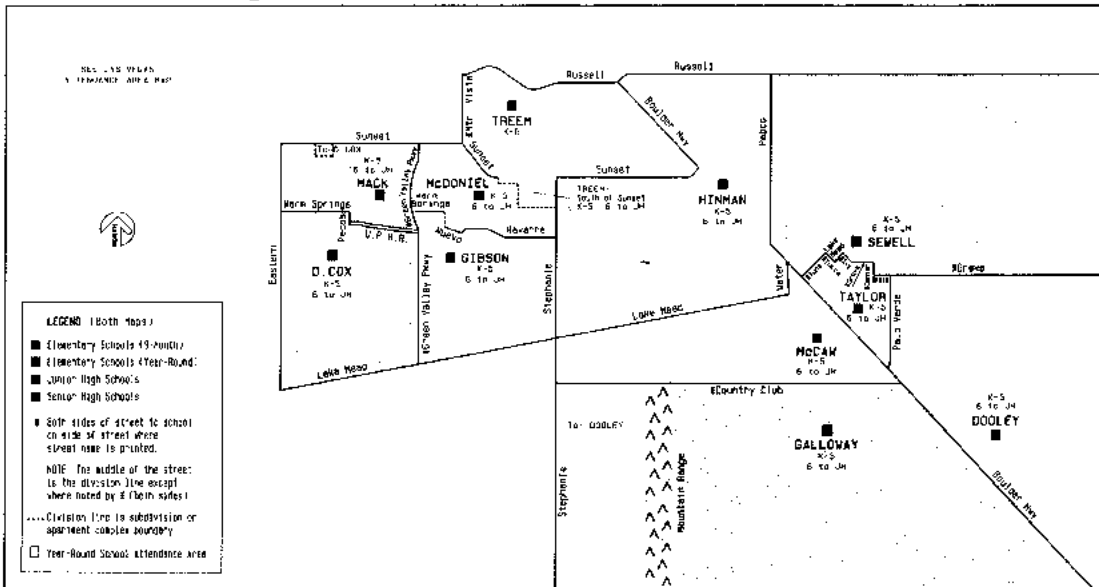


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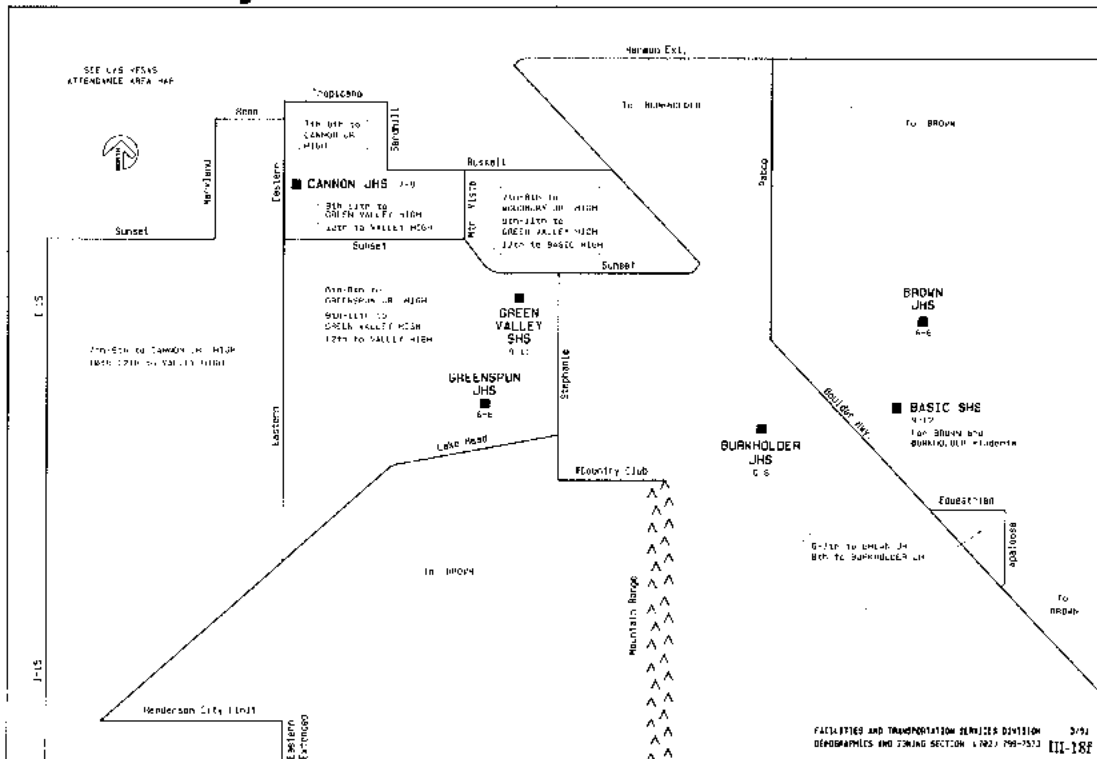
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Henderson Elementary Attendance Area

Map 6F
1991-92



Henderson Secondary Attendance Area



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13133

EVALUATION AND IMPLEMENTATION: EDUCATION FACILITIES					
POLICY (PROG.)	SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLEM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
2.6.3(1)	Minimize conflicts between major streets and schools.	CP, CCSD	ongoing	Set locational criteria.	City should write policy
A1 (A1.2)	Coordinate school planning in City with School District.	CP, CCSD	ongoing	Set locational criteria and assist CCSD in land acquisition.	
A1 (A1.3)	Coordinate plans of UNLV to include City locations.	CP, CCSD	ongoing	Present UNLV with possible development sites.	
A1 (A1.4)	Utilize General Plan to locate optimum school locations.	CP, CCSD	ongoing	Set locational criteria	
A2 (A2.1)	Assist in locating neighborhood elementary schools.	CP	ongoing	Set locational criteria.	City should write policy
A2 (A2.2)	Encourage CCSD to adopt quality facility design.	CP, CCSD	ongoing	Set design standards for school structures.	
A3	Cooperate to seek appropriate funding for CCSD.	FN	ongoing	Set level of service goal and attempt to meet that goal.	
B1	Provide an equitable means for sharing costs for joint use fac.	FN	ongoing	Complete a study to help determine fair share of pay.	
B2	Design local parks next to elem., junior high schools for joint use	PL, CCSD	ongoing	Facilitate joint use.	
B3	Cooperate with CCSD to acquire land suitable for joint use protect.	PL, CCSD	ongoing	Facilitate joint use.	

3F Library Services

Table 6

3F.1 Background

Libraries provide the Las Vegas Community with a necessary form of passive recreation, as well as a means for educating and entertaining people of all ages. Businesses in the Las Vegas area can use libraries as an important resource to help them succeed. Many of the libraries in the Las Vegas Valley also offer cultural art activities and events which enrich our community. It is important that we develop libraries in the City of Las Vegas that are accessible to all Citizens and that provide quality reading and viewing material.

The Las Vegas-Clark County Library District (LV-CCLD) provides library services to all of unincorporated Clark County, and the City of Las Vegas. The Board of Directors for the LV-CCLD consists of five representatives from the City of Las Vegas and five from Clark County.

Existing Inventory

The LV-CCLD currently has nine libraries at the urban locations shown on Map 7. LV-CCLD also provides 11 other rural locations which are not plotted on the map.

The Library District plans to add two library facilities in Las Vegas. The planned facilities are plotted on Map 7 and listed in the Appendix.

Analysis

The Library District has adopted a library planning standard of 1/2 sq. ft. of library space per capita. This standard equates to 25,000 sq. ft. per 50,000 residents. Therefore, each library, based on an average size of 25,000 sq. ft. is intended to service approximately 50,000 people. This equates to roughly a 5-mile diameter area surrounding each library. The libraries and their service areas are plotted on Map 7.



Library Service Analysis

	1990	1995	2000
# of Libraries *	4.5	6.5	6.5
Serviced Population **	225,000	325,000	325,000
Total Population	258,295	324,148	390,000
Population Not Served	33,295	0	65,000

* Includes a library outside Las Vegas that services the City
 ** Based on 50,000 population serviced per library

Source: Las Vegas-Clark Co. Library District

GP, CF Table 6 Library serv; PM p. 9-6-91

The Library District currently has four libraries within the City of Las Vegas and one library, located outside of City boundaries, which includes a portion of Las Vegas in its service area. Using the above standard of 50,000 people per library, the existing libraries can service approximately 225,000 Las Vegas residents. Approximately 33,295 Las Vegas Citizens are not adequately serviced by libraries.

The Library District also plans two new additional libraries in the City. The addition of the libraries will increase the serviced population to 325,000. The Department of Community Planning and Development projects the City's population in 1995 to be 324,148. The entire Las Vegas population will be serviced if the planned libraries are completed by 1995. (Table 6)

The Library District's services can also be assessed by the quantity of books they offer per capita. It is assumed all of the books are quality books. The District has set a goal of two books per person in Clark County, although currently only 1.16 books are offered per person. The National Average for similar size cities is 2.4 books per person. (Table 7)

Ten million dollars of a bond issue approved by voters in May 1991, will be used to acquire books. With these funds, the district will increase its book inventory by 444,000, for a total of 1,305,625 books. This increases the number of books per capita to 1.63, based on the 1990 population. In addition to the bond issue, the Library District devotes approximately 25% or \$1.5 million dollars of its yearly budget toward books. The District obtains

Table 7



Books per Capita

	1990
# of Books	581,625
Population*	741,458
Books per person	1.16

*Population from Census

Source: LV-CCLD

GP, CF Table 7 Books; PM p. 9-6-91

Table 8



Projected Books per Capita

	1995
# of Books	1,630,625
Projected Population*	872,714
Books per person	1.87

*Population projection from CLV Depart. of Community Planning and Development

Source: LV-CCLD

GP, CF Table 8 Projected books; PM p. 9-6-91

about 65,000 additional books per year with this money (325,000 books by 1995) with this funding source. Therefore, in 1995, the total amount of books in the District will be 1,630,625. Based on 1995 population estimates for Clark County, books per capita will equal 1.87 for 1995. (Table 8)

The Library District's staffing requirements are much lower than that of the national average according to the LV-CCLD. While the national average is 4.3 library personnel per 1,000 population, the District employs 3.06 personnel per 1,000 population. The number will probably increase as library use in the Valley increases.

"Las Vegas 2000 and Beyond" Actions relating to Libraries are:

- Provide leadership and creative mechanisms to help fund further development of the cultural community.
- Encourage and support development of adequate cultural facilities.
- Create environments favorable to the artist and the creation of art.
- Encourage partnerships between education, government, business and community cultural agencies.
- Create incentives and remove existing barriers to encourage private sector participation in the communities cultural development.

3F.1 Issues

Issue 1: Complement for City Cultural Services

The Library District offers many cultural and art features in library facilities. The City has a Community and Cultural Affairs Division. The programs should be coordinated in such a way as to supplement each other in fulfilling the total City wide demand for cultural activities.

Issue 2: Library Service Adequacy

Certain areas of the City are currently not serviced by libraries. However, after the completion of the planned libraries, most of the City will be serviced adequately by facilities. The Northwest Area will have to be assessed for service needs as population grows.

The Las Vegas-Clark County Library system currently offers less books per capita than similar size cities in the United States. After the completion of planned facilities, the Library District should be able to increase its focus on book acquisition.

3F.3 Goal, Objectives, Policies and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Ensure that all citizens of Las Vegas are adequately serviced by library facilities.

Policy A1: Work with the LV-CCLD to locate and acquire strategic development sites for library facilities and programs in the City to better service the community.

Program A1.1: Provide a liaison from the Department of Community Planning and Development to the LV-CCLD to assist in locating and acquiring land in the City for library uses.

Objective B: Provide the Citizens of Las Vegas with a multitude of diverse cultural and art events and activities.

Policy B1: Maintain communications between the LV-CCLD and the Division of Cultural and Community Affairs on matters regarding Cultural Activities in the City of Las Vegas.

Program B1.1: Coordinate City cultural programs with LV-CCLD to help diversify cultural programs and locations so that all citizen's cultural interests of the City are served and not duplicated.

3F.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

CP	Community Planning and Development
LVCCLD	Las Vegas-Clark County Library District
PL	Parks and Leisure

City of Las Vegas Library Services

Legend

Urban Branches

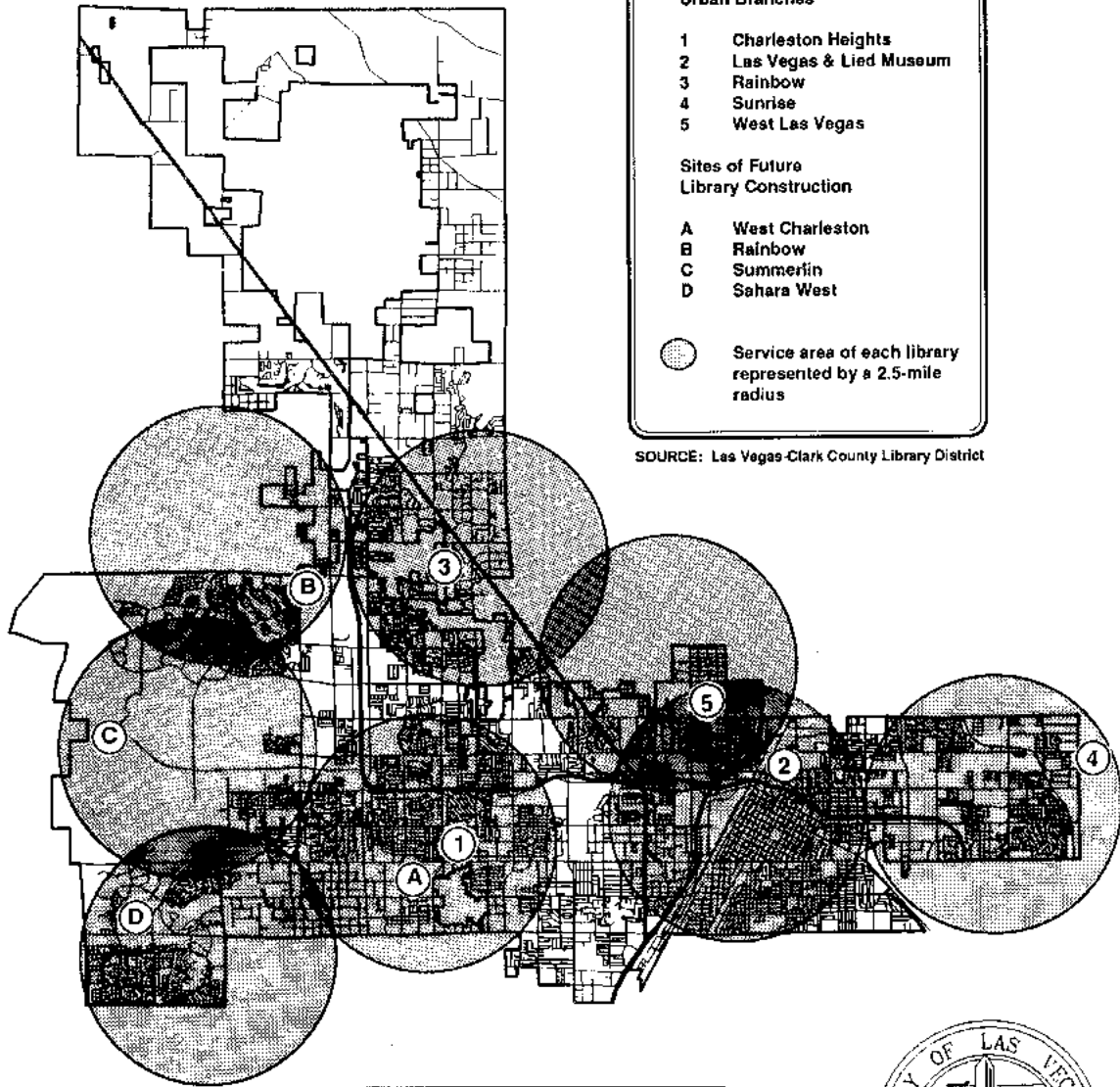
- 1 Charleston Heights
- 2 Las Vegas & Lied Museum
- 3 Rainbow
- 4 Sunrise
- 5 West Las Vegas

Sites of Future Library Construction

- A West Charleston
- B Rainbow
- C Summerlin
- D Sahara West

Service area of each library represented by a 2.5-mile radius

SOURCE: Las Vegas-Clark County Library District



March 15, 1991

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Geographic Information System



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EVALUATION AND IMPLEMENTATION MATRIX: LIBRARY DISTRICT					
POLICY (PROG.)	SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1 (A1.1)	Assist the LV-CCLD in locating and acquiring future lib. sites	OP, LV-CCLD	ongoing	Work with LV-CCLD to acquire best suited sites.	
A1 (A1.2)	Seek adequate funding for library operations and develop.	FN	ongoing	Study library needs and costs.	
B1 (B1.1)	Coordinate cultural program with the City's Cultural Division.	LV-CCLD, LV-CCLD, PL	ongoing	Develop communication regarding programs from each.	

3G Leisure And Cultural Services

3G.1 Background

The demand for City leisure and cultural facilities and programs in Las Vegas is a function of a variety of variables. While some of these variables can be readily defined and quantified, others must be examined qualitatively and are subject to different interpretations. These variables are:

- population (increase/decrease)
- access to existing facilities (distribution of pop./physical barriers/economic barriers)
- quality of existing lands and facilities
- quantity and quality of existing leisure time programs
- private parks and recreation programs
- interests of the region and the locale
- age breakdown of the population
- climate of the area
- parks developed by other entities (locations, services, quality)
- special considerations (tourists, urban areas)

The City of Las Vegas' Department of Parks and Leisure is responsible for planning, developing and maintaining leisure and cultural facilities and programs within the community. To accomplish these functions, the Department is organized into six divisions:

- Administration
- Parks and Open Spaces
- Recreation
- Adaptive Recreation
- Cultural and Community Affairs
- Senior Citizens

"Las Vegas 2000 and Beyond" Actions relating to Parks and Leisure are:

- Provide leadership and creative mechanisms to help fund further

development of the cultural community.

- Encourage and support development of adequate cultural facilities.
- Create environments favorable to the artist and the creation of art.
- Encourage partnerships between education, government, business and community cultural agencies.
- Create incentives and remove existing barriers to encourage private sector participation in the communities cultural development.
- Create an urban/metropolitan parks and recreation entity ...under one multi-funded regional district.
- Clarify local government programs for providing recreation and leisure activities.
- Encourage private development of open spaces, leisure facilities and landscape maintenance.
- Develop a regional park master plan.
- Generate alternative funding to organize a park foundation.
- Use volunteer seniors to staff a school for homeless children.
- Regulate local services and money for seniors.
- Provide affordable housing and medical services for seniors.
- Encourage wellness programs in senior housing locations.
- Use volunteer Senior Citizens to assist teachers and students.

Parks and Open Spaces

Introduction

Parks and open space are an important part of improving the quality of life for Las Vegas citizens. Parks and open space give people an opportunity to exercise, relax, and congregate for group activities. In addition, parks add an aesthetic value to the City, which improves public perception and interest in the area. The Parks and Open Spaces Division of the Department of Parks and Leisure is responsible for managing all City owned parks and landscaped areas in the City. The

Division also maintains 22 miles of medians, 19 "school parks" and is responsible for preparation and cleanup of sites for programs and activities.

Existing Inventory

The Parks Division currently maintains 30 City parks. Through joint use agreements with Clark County School District, the community is also allowed to utilize 48 School District sites for park and recreation use. Table 9 lists the City parks along with their size, and recreational facilities. The City parks in Table 9 are also classified by size and/or function into four park types as defined by the Parks Department of Las Vegas. The parks are classified as Neighborhood Parks, District Parks, Major Urban Parks, or Regional Parks. The Department of Parks and Leisure plans on adding nine new parks over the next five years. A listing of planned or proposed parks can be found in the Appendix section III.

Neighborhood Parks (0-25 acres) are intended to serve households located within walking distance of the park (neighborhoods). The facilities within these parks are primarily limited to family recreation such as playgrounds and picnicking. The parks should be centered within a neighborhood environment and ideally be located adjacent to an elementary school in an effort to complement the school recreation facilities. Determination of a neighborhood park location should consider the density of the area being considered for development, physical barriers of access to the park (e.g. large volume transportation routes), existing park location, and the age breakdown of the user populace. (Table 10)

District Parks (25-50 acres) are intended to serve several neighborhoods. The district park offers a wider array of recreation facilities, attributed to a larger service population and thus, a greater diversity of interests. In addition to the uses offered by neighborhood parks, the parks might offer play fields

for team sports or courts for tennis, volleyball, and basketball and areas for special events, nature study, and community/senior center. Sites adjacent to junior and senior high schools provide excellent opportunities for development as district parks. Other community facility sites offer viable alternative development locations, such as next to libraries, fire stations, and police stations. (Table 10)

Major Urban Parks (50-100 acres) differ from district parks primarily in park size, service area, and function. Since the parks are larger, they may offer unique activities that could not be supported by the smaller user populations of the district parks or neighborhood parks. (Table 10)

Regional Parks (100 acres or more) serve an entire urban area. The park should include a scenic, undisturbed landscape and offer activities such as horseback riding, picnicking, camping and swimming, fishing, or boating in water oriented areas.

Analysis

Parkland standards have been developed by the Department of Parks and Leisure. The standards are intended to base park needs on suitable levels-of-service. The standards attempt to quantify some of the mostly qualitative variables involved in parkland assessment. The Parks and Leisure Department is currently using the standards listed in Table 10 to assess priority areas for park development. Map 8 shows the location of City Parks as

well as their service areas based on the above standards. The map also indicates those areas not serviced adequately by City parks. Table 10 also shows the City's parkland in comparison to City standards.

The above standards are intended to base park needs on suitable levels-of-service. The standards, however, lack the ability to adequately assess many qualitative variables associated with the leisure activity assessment. The following is a list of variables which might affect the provision of leisure activities. A Leisure and Cultural Facilities Master Plan for the City should be developed which analyzes these variables thoroughly. A more complete explanation of how these variables effect leisure and cultural service pro-

Table 10

Las Vegas Parks Analysis			
CITY OF LAS VEGAS PARKLAND STANDARDS			
Park Type	Service Area	Desired Size	Ac/1000 Persons
Neighborhood Park	1/2 mile radius	0-25 acres	2-2.5
District Park	1-2 mile radius	25-50 acres	2.5-3
Major Urban Parks	15 min. drive	50-100 acres	2.5-5
Regional Parks	Entire urban area	100 acres or more	10
CITY OF LAS VEGAS PARKLANDS vs. CITY OF LAS VEGAS STANDARDS			
Park Type	Parkland in City	Min. Requirements	Adequacy
Neighborhood Park	192	580.24	-388.24
District Park	41	725.3	-684.3
Major Urban Parks	251	725.3	-474.3
Regional Parks*	0	1000.5	-1000.5
*includes Floyd Lamb State Park			

Source: CLV Parks & Leisure Dept.

GP.CF Table 10 LV Parks;PM;pm/9-9-91

Table 9

City of Las Vegas Parks

NEIGHBORHOOD PARKS

NEIGHBORHOOD PARKS	ACREAGE	INVENTORY KEY #
Angel Park	10	5,6,11,13,15,17
Cragin Park	12	3,7,13,16,17
Coleman Park	4	5
Doolittle Park	19	2,3,4,5,6,7,11,13,16
Hadland Park	18	2,3,5,7,13,16
Jaycee Park	22	2,3,4,5,6,7,9,10,11,13,15,17,18
Lions Mem./Fantasy Park	21	2,3,5,8,9,10,13,18
Luthertha Johnson Park	0.75	5
Mojave Ball Fields	14	3,13
Mary Dutton Park	0.25	5
South Meadows Park	2	5
Stewart Place Park	2.5	2,5
W. Charleston Lions Park	2	5
Baker Park	6.5	3,5,7,16,17
Baskin Park	7.5	2,5,6,11,13,15,17
Charleston Heights Park	6	2,3,5,7,11,18
Dexter Park	6	2,3,4,5,13
Ethel Pearson	1.5	2,5,17
Heers Park	12	5,7
Huntridge Circle Park	3.5	No Facilities
James Gay III Park	1.5	4,5,17
Mirabelii Park	3.5	4,5,10
Rotary Park	8	2,5,9,10,13,16,18
Wildwood Park	1	4,5,6,11,18
W. Wayne Bunker Park	7.5	5,17
Total	192	

DISTRICT PARKS

Ed Fountain Park	41	2,3,5,7,10,12,13,18
Total	41	

MAJOR URBAN PARKS

Freedom Park	62	2,3,5,6,7,9,10,11,13,18
Lorenzi Park	62	1,2,3,4,5,7,9,10,13,14,17,18
Nature Park	86	No facilities
Total	210	

REGIONAL PARKS

No regional parks in inventory

Total	0
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TOTAL PARKLAND

443.5

KEY

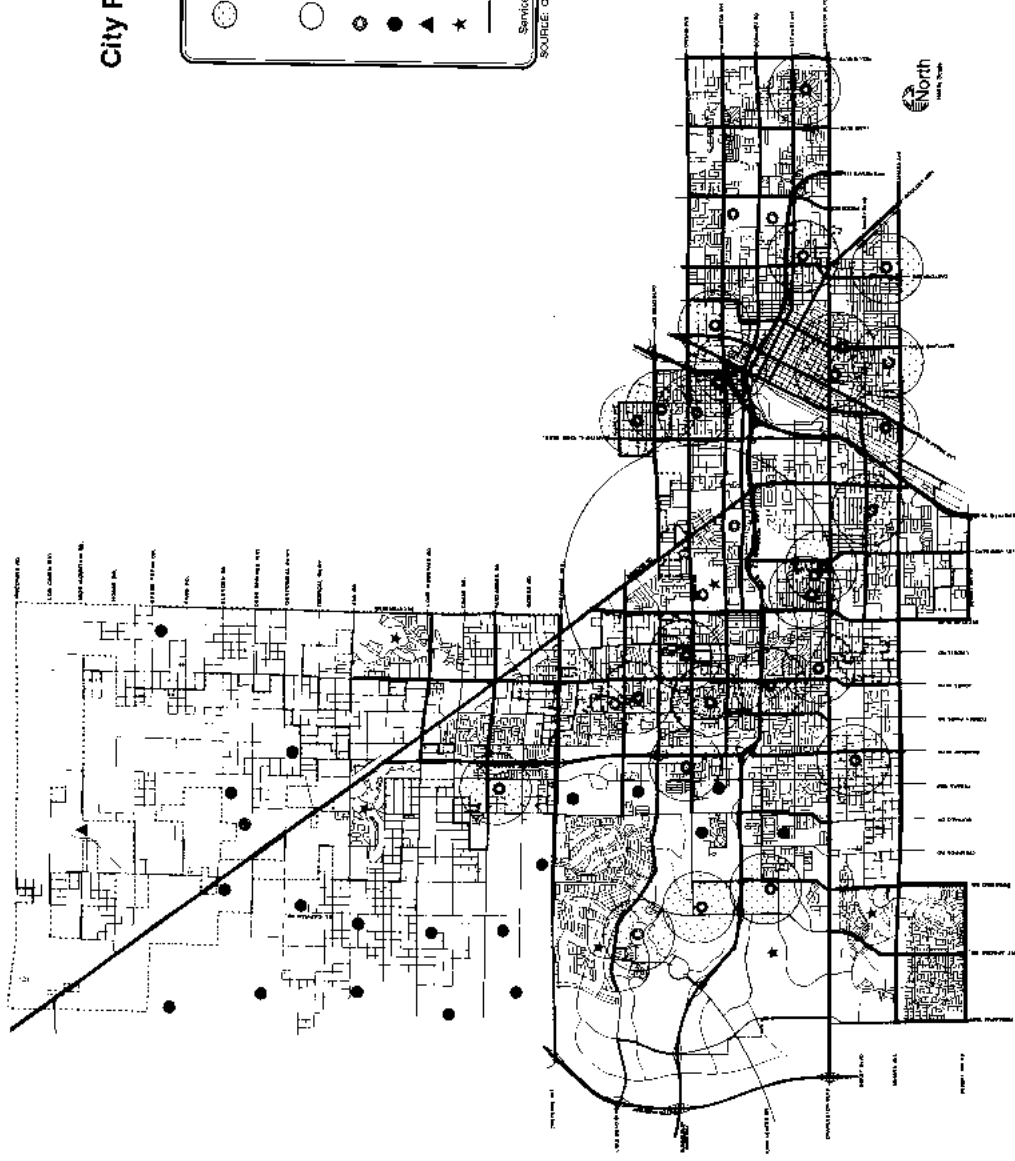
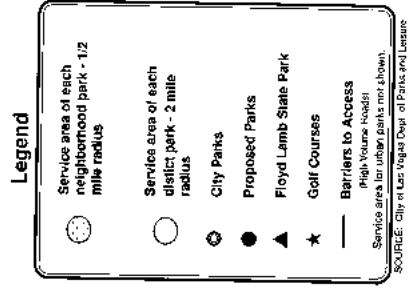
Fitness center	1	Football/soccer	7	Restrooms	13	Barbecue fac	2
Frisbee golf	8	Shuffleboard	14	Ball diamonds	3	Picnic area	9
Spray fountain	15	Basketball	4	Horseshoes	10	Swimming	18
Play area	5	Jogging track	11	Tennis	17	Fitness court	8
Over-the-line	12	Volleyball	18				

Source: CLV Parks & Leisure Dept.

GP.CF Table 9 CLV Parks; PM/pm/8-9-91

Map 8

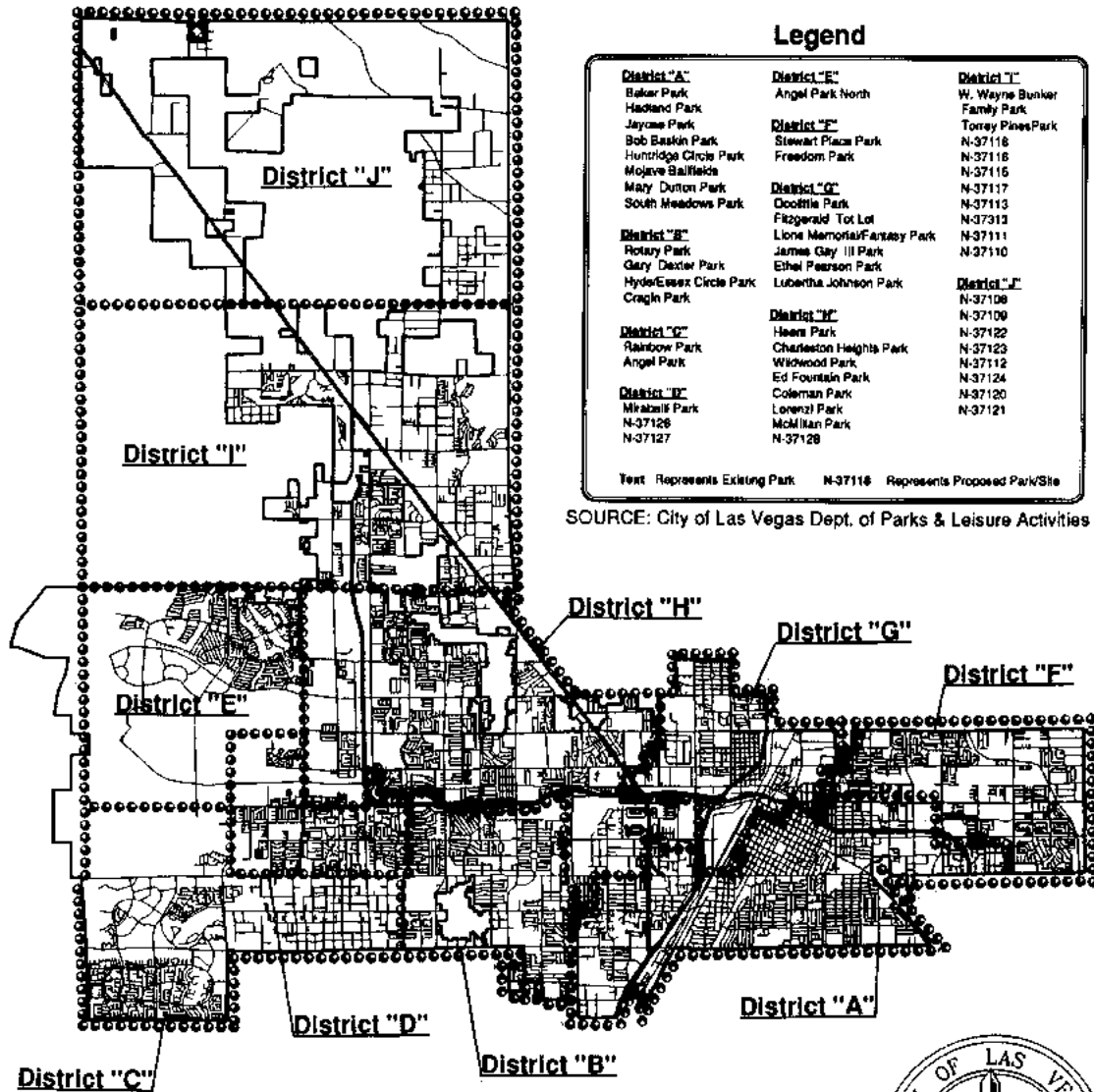
City Park Service Areas



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Parks District and Impact Fees



May 15, 1991

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Geographic Information System



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vision is located in the Appendix section III.

Access to existing facilities

Access can be limited by one or all of the following items:

- Physical Barriers to Access:
 - High volume roads
 - Land terrain
 - Distance From Homes to Park or Facility (Map 8 displays some physical barriers)
- Economic Barriers to Access
- Social Barriers to Access

Quality of existing parks and leisure facilities

Existing parks which contain obsolete or damaged equipment limit the effectiveness of the park. Inventories of park and facility equipment must be kept to insure they are operating properly. Existing parks with limited activities fill a statistical acreage need, although they do not necessarily meet the activity demands for the area.

Interests of the region and the locale

Different areas of the City may hold varied leisure interests. While tennis may be the popular game in one section of town, other areas may favor volleyball or basketball. Interests can be generally defined by conducting a community attitude survey.

Age breakdown of the population

Many areas within the City may fall short of serving a dominant age group that requires special recreational uses or equipment.

Parks and leisure activities provided by other entities

Parks or leisure activities provided by other entities, such as the State or private companies, either within the City limits or including City areas within their service boundaries may negate a need for similar City services to be offered.

Recreation

Introduction

The City of Las Vegas offers year round recreation opportunities to the community through the Recreation Division of the Department of Parks and Leisure Activities. Activities range from sporting events to educational activities to community and child care activities. The Safekey Program is an example of one recreation program which provides children with recreational and educational opportunities after school until their parents return from work or appointments. The program is offered at 30 locations throughout Las Vegas.

Existing Inventory

The Recreation Division offers a diverse program of recreational opportunities at various centers throughout the City. Below is a list facilities utilized for recreational purposes.

Community Centers and Community Schools - The Recreation Division utilizes the following community schools and community centers for arts, crafts, education, physical recreation, and safekey programs. Community schools are Clark County School District junior high schools located in Las Vegas which are utilized by the Parks and Leisure Department after school hours through the joint use agreement between the City and CCSD. The programs offered in community schools are staffed by employees of the school and the Recreation Division. Community centers owned and operated by the City of Las Vegas are listed in Appendix section III. (Map 12)

Stewart/Mojave Sports Center - This is an indoor recreation center used for a variety of physical recreation uses.

City Parks - City Parks are utilized for sporting events, community activities, reservations for private parties and picnics.

Pools - The Recreation Division utilizes one year round City pool and six seasonal City pools for aquatic programming.

Elementary and Junior High Schools - Through a joint use contract between the City of Las Vegas and the Clark County School District, the City may utilize school facilities after school operations for the purpose of recreation, education, and community activities. High schools are not utilized due to the large number of school activities that take place after normal school hours.

Analysis

Based on current and projected population, certain needs can be assessed using guidelines that define adequate levels of service. In addition to the guidelines, planning for recreational facilities must examine the locations and accessibility to the community users. The following standards can be used to assess recreation needs after inventories are completed for these facilities.

<u>Facility</u>	<u>Standard Population</u>
Softball Diamond	1/6,000
Swimming Pool	1/30,000
Golf Course (18 holes)	1/50,000
Tennis Court	1/3,600
Basketball Courts*	1/5,000
Baseball Fields*	1/5000
Volleyball Courts*	1/5000

SOURCE: Guidelines from Department of Parks and Recreation

** from National Recreation and Park Association*

Due to explosive growth in recent years, a growing popularity of the City's year round recreation programs and a minimum number of fields and courts, recreation facilities can not always be maintained properly. Because the fields and courts are in year round use, there is not ample time for grass to grow back, new pavement to be poured, or for new equipment to be installed. When new facilities are developed, the

demand for use of the facility occurs immediately. The City needs to be able to rotate use on fields to allow them time for recuperation, repair and additions. This can only be accomplished by adding more fields to the current inventory.

Adaptive Recreation

Introduction

Adaptive Recreation serves both mentally and physically challenged citizens. The goals of adaptive recreation programs in the City of Las Vegas is to meet the physical, emotional, social, and intellectual needs of disabled citizens by providing planned recreational experiences. Activities are designed to maintain and increase the participants recreational and leisure skills. The Adaptive Recreation Division is responsible for these programs within the City of Las Vegas.

Existing Inventory and Analysis

Programs and events are currently available through the Lorenzi Adaptive Recreation Center and the Adaptive Outreach Unit. The center services approximately 80 clients on a daily basis. An additional 10-20 persons are put on waiting lists due to the small facility size.

In addition to the adaptive recreation centers, it is the goal of the Department of Parks and Leisure to facilitate adaptive uses throughout all park and recreation facilities.

The Outreach Unit provides after-school recreation, recreational swimming, wheelchair sports, summer camp, and field trips for the physically handicapped. Leisure Connection, a program administered through the outreach program enables physically handicapped adults to travel in groups to movies, bowling, restaurants, etc. This program is designed to help handicapped citizens reenter society and the community.

The Division also administers a number of sports activities and civic events, specifically adapted for handicapped citizens.

Recreational Trails

There is a growing need for convenient outdoor recreation lands and tracts of open space in or near urban areas. In "The Report of the President's Commission on American Outdoors", it is pointed out that by year 2000, eighty percent of Americans will be living in metropolitan areas. With this in mind, it is important that recreational needs of our community be addressed before or, at minimum, concurrent with our growth so that accessible recreational opportunities are not lost.

Recreational trails can transform leisure and cultural facilities into a leisure and cultural "system". For example, the "system" might enable a bicyclist or a pedestrian to go from the residential area that they live in to a local or regional park facility and then to another park facility via a secure trail. In the Northwest, horse keeping and horseback riding are very popular due to the rural character of the area and the larger lots where horses are permitted by zoning. As a result of these desires and concerns, it was proposed that the City establish a recreational trail system.

Map 10 depicts general locations of frequently used trails in the Northwest Area. The proposed trail plan does not depict precise trail alignments or exact locations of improvements. Detailed trail planning should accompany adjacent land development and street right-of-way improvement. As a tool for implementation, it is vital that a Recreational Trail Master Plan be completed for the City of Las Vegas. This Master Plan could establish trail opportunities and routes within the City, as well as linkages to regional trails connecting to places like Floyd

Lamb State Park, Mt. Charleston, Red Rock Canyon and BLM public lands.

Cultural Arts

Introduction

Cultural activities increase a community's quality of life by providing opportunities to develop citizen learning and/or participation in fine arts and humanities. The activities offer residents of the City a different option for creative and satisfying use of their leisure time. Cultural arts in Las Vegas include arts and humanities programs which focus on the presentation of the visual and performing arts, while addressing ethnic diversity, education, audience development, and the needs of special populations. A successful cultural and community affair program can provide an enjoyable leisure time activity for citizens of all ages and backgrounds. Cultural and Community Affairs, a division of the Department of Parks and Leisure Activities, is responsible for staffing, planning, and running cultural programs for the City.

Existing Inventory

Currently, the City has two cultural art centers catering to the needs of cultural and community affairs: the Reed Whipple Center and the Charleston Heights Art Center. City Parks and rented theatre and convention space at Cashman Field are also utilized by this Division to fulfill its needs for activity space. Other proposed facilities for cultural uses are listed in the Appendix Section III.

The Division of Cultural and Community Affairs offers a variety of cultural and community enriching programs. Some of the programs currently offered are listed in Appendix Section III.

The Cultural and Community Affairs Division has prepared a ten year plan which discusses these programs and

future facility proposals in more detail.

Analysis

Cultural facility and program needs must be assessed in a qualitative manner. Analysis is based on what services are currently offered, currently offered and deficient, or not offered. Presently, many programs cannot be offered due to a lack of space for training and performances. The Community and Cultural Affairs ten year plan addresses programming needs.

The City has two cultural facilities located in the central and western areas of the City. The northwest area, eastern area and southern area of the City are presently not serviced by facilities.

Senior Citizen Facilities

Introduction

The Senior Citizen Programs Division of the Department of Parks and Leisure offers cultural, social and recreational activities to the over 55 community. The Division offers classes, informal socialization, dances and, with the help of federal aid, legal assistance.

Existing Inventory

The senior population of Las Vegas is served primarily by the Las Vegas Dula Senior Complex and the Derfelt Senior Center. The centers function as gathering places for seniors. The Senior Law Project is also administered through the Division.

Dula Senior Complex - Within this complex, the Senior Citizen Programs Division provides exercise and dance classes, arts and crafts classes, discussion groups, card groups, billiards and other recreation and leisure time activities. Dula Center, which is attached to the senior complex, offers active seniors a complementary variety of recreational facilities in the same convenient central location.

Derfelt Senior Center - The Derfelt

Senior Center is located in Lorenzi Park. This smaller center functions as a neighborhood center for seniors. Arts and crafts, discussion groups and a variety of classes and activities take place at Derfelt Senior Center.

Senior Law Project - A program designed to give seniors free legal advice. The project is currently administered at 345 North 11th Street.

Analysis

Senior centers, ideally, should be located within walking distance (one mile) of all senior citizens. Since seniors are not all living in pockets throughout the community, this goal would be difficult to achieve. A more realistic approach would place senior centers in the proximity of large concentrations of senior citizens. The Senior Citizen Programs Division uses a five mile service radius as a realistic approach to serving the senior citizen populace. The five mile radius relieves seniors from taking long drives through unfamiliar areas. Research shows that the primary users of the senior facilities are 70 years of age and over, therefore easy access is a key to providing effective senior services. The locations on Map 11 identify areas of high senior concentrations based on "Las Vegas Perspective" data. The map also identifies existing and proposed senior centers and their service areas.

Supplementary Leisure and Cultural Resources

Joint Use Agreement - Clark County School District

The Clark County School District provides an excellent opportunity to improve the efficiency of recreation provision through joint-use agreements. The joint-use agreements divide responsibilities for park operations and maintenance between the Clark County School District and the City of Las Vegas Department of Parks and Leisure. Joint-use agreements create

recreational opportunities in areas that might otherwise be deficient in one or more recreation activities due to lack of funds or inability to secure land.

It is evident that both the Clark County School District and the Department of Parks and Leisure Activities are maximizing use of the school facilities and the City's Park system. However, Parks and Leisure Time Activities programs can not all be realized due to a shortfall in the number of facilities in comparison to demand for recreation services. Presently, scheduling for school use and park use is full and new programs cannot be activated without increased staffing and facilities. The Recreation Division, Adaptive Recreation Division and Parks and Open Space Division participate in Joint-Use Agreement activities. Some school facilities might also provide facilities similar to a Neighborhood Park or leisure activity center. An inventory of school facilities must be taken and assessed when determining future park needs in a Parks and Leisure Plan.

Las Vegas-Clark County Library District

The Las Vegas-Clark County Library District has planned a total of six libraries in the City of Las Vegas. The libraries will provide cultural facilities such as art centers and museums, as well as its primary role of supplying books. The Community and Cultural Affairs Division should coordinate activities with the Library District to maximize cultural opportunities for residents of the City of Las Vegas. Facilities and program Inventories of both entities should be examined and coordinated to eliminate possible duplication of services.

State Park Resources

State Park Resources play an important role in parkland need assessment. Services offered within the various parks may alleviate the need for duplicating those services within the City Park system. State parks located within

the City may also eliminate the need for smaller neighborhood parks for residential areas located in close proximity to the regional or state park. Floyd Lamb State Park directly affects the provision of parkland within Las Vegas. This State Park is located within the City boundary and offers activities compatible with interests of the Northwest area of the City. The park offers picnicking, horse riding, gun ranges and a number of other activities. Because the population in the Northwest area of the City is sparse, it is inefficient to offer City Park services in all Northwest locations. Floyd Lamb State Park fills some of that void for park and passive recreation service.

Natural Reservations

The State of Nevada enjoys the luxury of having many natural reservations that offer physical and passive recreation activities as well as natural beauty. The Las Vegas area is surrounded by natural reservations. Toiyabe National Forest and Red Rock Canyon lie on the west side of the Valley. Hiking, climbing, snow skiing, picnicking and passive recreation can be enjoyed in these locations. The Lake Mead National Recreation Area is located on the east side of the Valley. This area includes recreational opportunities such as swimming, water skiing and fishing, as well as hiking and site seeing. Natural desert surrounds the Valley. The desert is currently protected land maintained by the Bureau of Land Management. Horse riding and sight seeing are popular desert activities.

Clark County and North Las Vegas

Clark County and North Las Vegas both provide parks which service areas within the City. The City should avoid developing new parks which overlap services with these existing parks. Parks in North Las Vegas and Clark County with service areas extending into the City need to be identified and considered when developing new parks.

Private Facilities

Many specialized leisure activities not made available by the City may be offered by private interests. A study examining private park and recreation provision should be initiated to determine if the private interests are sufficient enough to alleviate the need for the City to offer the same services.

3G.2 Issues

Issue 1: Leisure and Cultural Facility Development

Certain areas of the City are not serviced adequately by leisure and cultural facilities. Some areas have no facilities, while in other areas improper location restricts full use of facilities by the intended market population. A leisure or cultural facility placed on the opposite side of a high volume road from the intended target population may greatly limit its use.

Due to explosive growth in recent years, the City has not been able to keep pace with demands for park land, recreation and adaptive recreation facilities, senior facilities, or cultural arts facilities. This need can be shown by comparing existing Las Vegas facilities with national and local standards. An additional need exists for more data for planning leisure and cultural facilities including population characteristics, citizen interests and perceptions, and available facilities. This can be obtained through surveys and the 1990 Census.

Existing parks with limited activities fill a statistical acreage need, although they may not necessarily meet the actual activity demands for the area. Inventories must be studied to assess which services are not offered in certain areas of the City.

The City needs to develop a master leisure and cultural facilities plan that addresses many of the park location issues listed previously. It is essential for orderly growth that this information be collected, analyzed and used to guide future leisure and cultural development in the City.

Issue 2: Services Provided by Other Entities

Other public and private agencies provide leisure and cultural activities which might be duplicated unnecessarily. A study is needed that assesses their impact on activities provided by the City.

Issue 3: Staff Requirements

An increase in facilities will require an increase in staff. At the present time, the Parks and Leisure Department lacks personnel to properly maintain and administer programs to meet the existing demand. The demand for programs will increase with population growth, adding to the current staff deficiencies.

Issue 4: Maintenance

Sports activities facilities cannot be maintained properly due to year round use on the limited number of facilities for Recreation Division use. The grass needs ample time to recover from use. Equipment is in constant use, leaving little time for replacement or repairs.

Existing parks which contain obsolete or damaged equipment limit the effectiveness of the park. Inventories of park and facility equipment must be kept to insure they are operating properly.

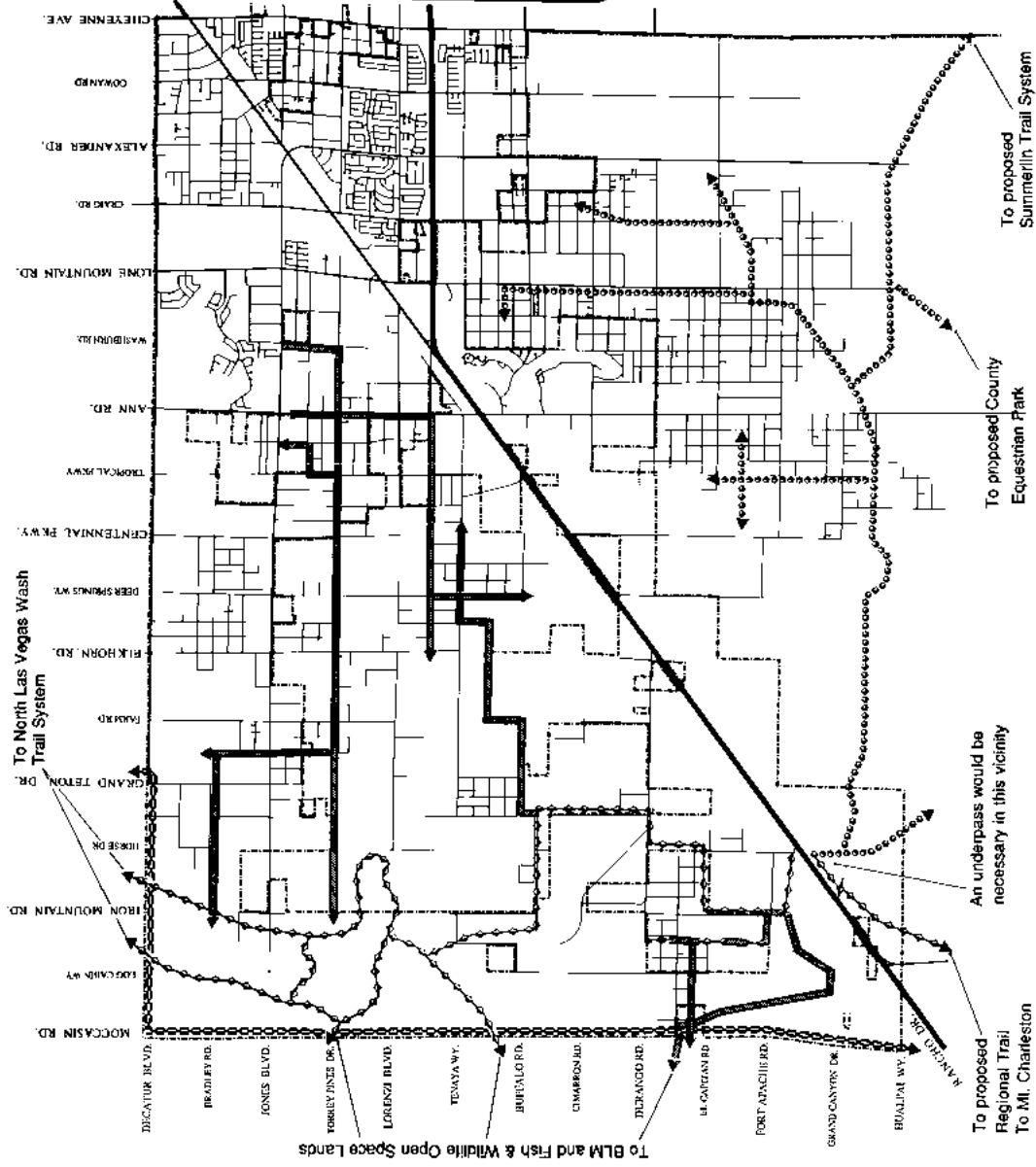


Map 10

Proposed Trails

LEGEND

- Suggested Lone Mountain Area Trails
- Suggested Sheep Mountain Area Trails
- Proposed Park Trail and Recreational Trail to Mt Charleston Wilderness Area
- Nevada Power Line Trail








Source: City of Las Vegas, Dept. of Community Planning & Development

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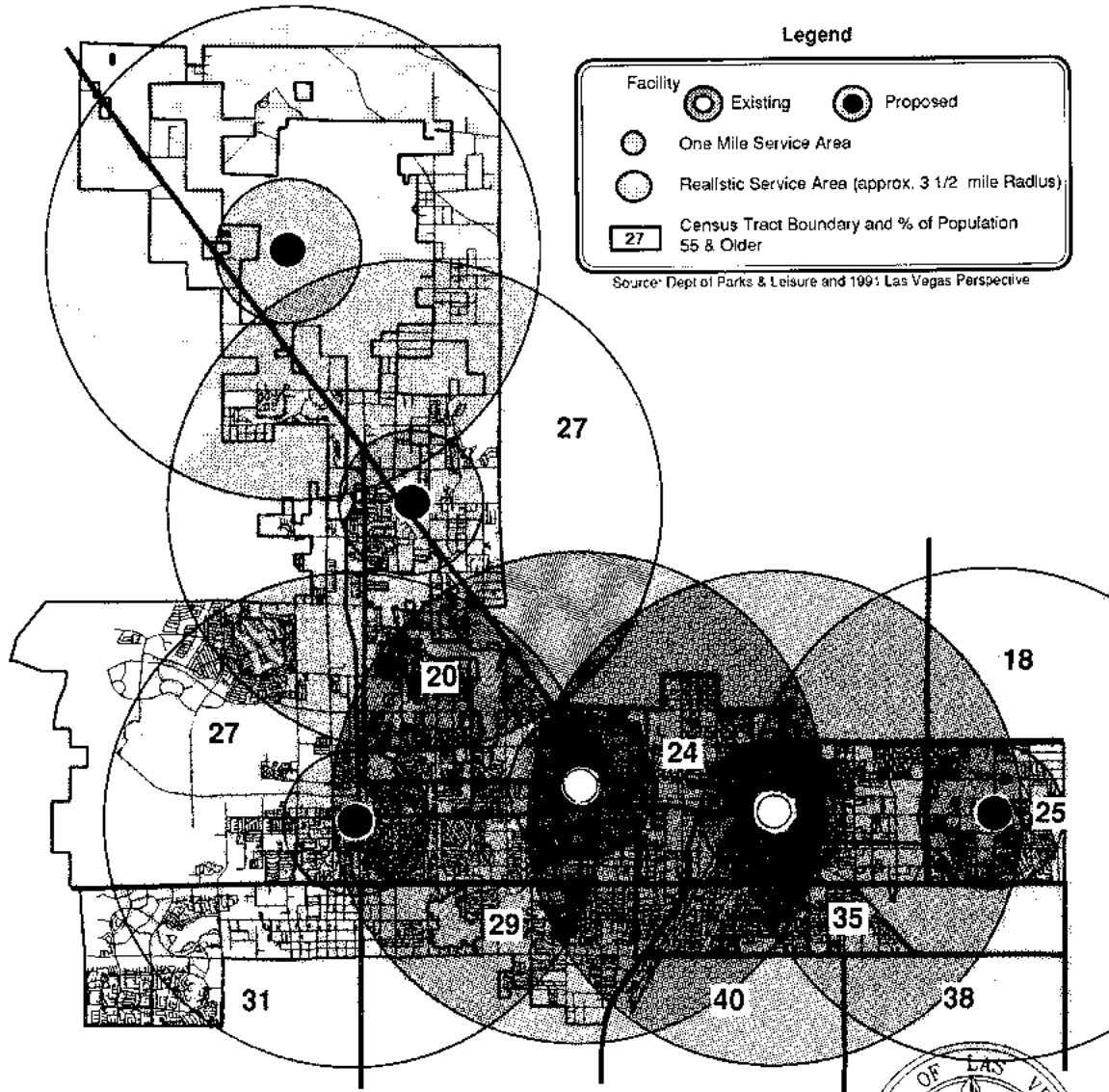
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Senior Center Service Area

Legend

- Facility
-  Existing
 -  Proposed
 -  One Mile Service Area
 -  Realistic Service Area (approx. 3 1/2 mile Radius)
 -  Census Tract Boundary and % of Population 55 & Older

Source: Dept of Parks & Leisure and 1991 Las Vegas Perspective



May 12, 1994

GIS maps are normally produced only to meet the needs of the City. No Warranty is made as to the accuracy or quality of maps.

Geographic Information System



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Community Facilities III-30c

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Las Vegas General Plan
Community Facilities Element

Map 12

Parks, Schools and Other Community Facilities

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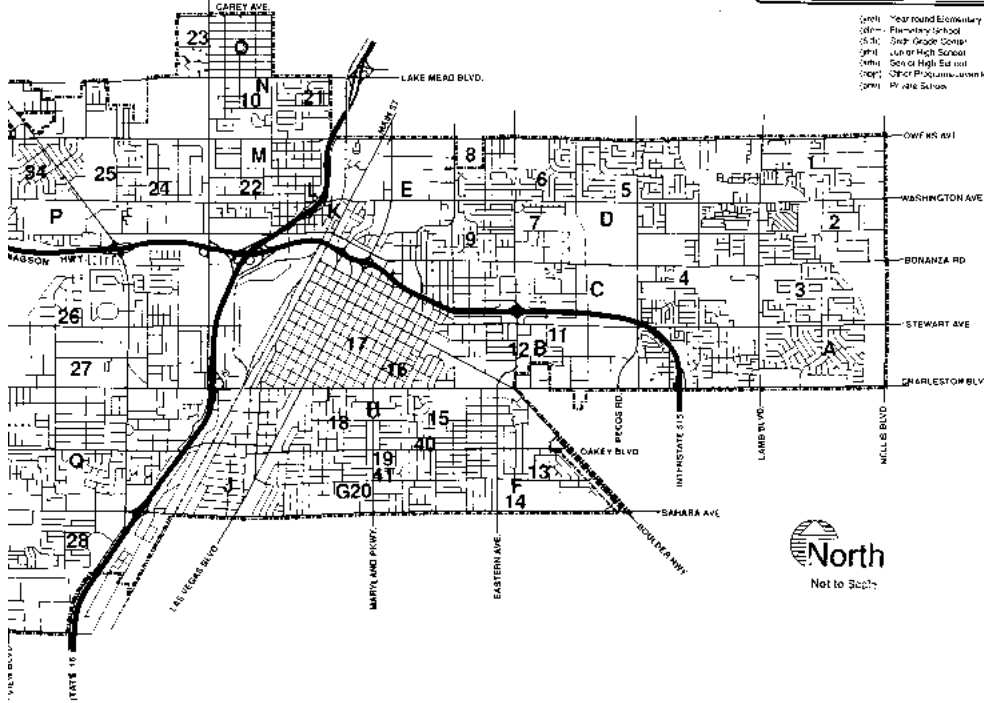
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Legend		Legend	
Parks		Schools	
A	Stewart Place Park	1	K2 J.Ear (yrs)
B	Hadland Park	2	Dell H. Hobbs (yrs)
C	Mojave Ball Fields	3	E. Del Edwards (yrs)
D	Freedom Park	4	Oran K. Graggan (yrs)
E	Lions Memorial Fantasy Park	5	C.C. Rorow (yrs)
F	Joyce Park	6	Waller Bracken (elem)
G	Baker Park	7	Robert Lunt (elem)
H	Huntledge Circle Park	8	Flancho (yrs)
I	Mary Dutton Park	9	Hale H. Swenson (yrs)
J	Scull Meadows Park	10	Matt Kelly (yrs)
K	James Gavill Park	11	Roy W. Mann (yrs)
L	Clive Priggen Park	12	Varely C. (yrs)
M	Pilgrimage Trail	13	John F. Miller (yrs)
N	Osborne Park	14	K.O. Knapp (yrs)
O	Louella Johnson Park	15	Crestwood (elem)
P	Lovell Park	16	St. Joseph's (yrs)
Q	Bob Daskin Park	17	Las Vegas (yrs)
R	Rotary Park	18	John S. Park (elem)
S	Craig Park	19	Bob Sp. Gorman (yrs)
T	Hyde Essex Circle Park	20	J.C. Fienert (yrs)
U	Ed Fountain Park	21	Kil Carson (yrs)
V	Lisa Vegas Montoya G.O.	22	Melison (yrs)
W	Miracle Park	23	Kenneth R. Boover (yrs)
X	Gary Dexter Park	24	Matt Hoggard (yrs)
Y	Rainbow Park	25	Faith Lutheran (yrs)
Z	Canyon Gate C.C.	26	Our Lady of Las Vegas (yrs)
AA	Angel Park G.C.	27	Howard Wadden (yrs)
BB	Angel Park	28	Rex Bell (elem)
CC	Angel Park North	29	Edward W. Clark (yrs)
DD	N-37-26	30	James Cashman (yrs)
EE	Golden Park	31	Vegas Verde (elem)
FF	N-37-28	32	Hyde Park (yrs)
GG	N-37-29	33	E.W. Griffin (elem)
HH	N-37-29	34	Twin Lakes (yrs)
II	McKellan Park	35	Robert O. G. (yrs)
JJ	Wildwood Park	36	Ruth Hyle (elem)
KK	Charleston Heights Park	37	Western (elem)
LL	Heers Park	38	Hed Rock (elem)
MM	N-37-130	39	Dora Hancock (elem)
NN	San City, Summer C.C.	40	Fleming B. (elem)
OO	W. Wayne Bunker Family Park		
PP	N-37-118		
QQ	N-37-118		
RR	N-37-115		
SS	N-37-117		
TT	N-37-114		
UU	Parker Desert C.C.		
VV	Los Prados C.C.		
WW	N-37-113		
XX	N-37-113		
YY	N-37-110		
ZZ	N-37-112		
AAA	N-37-122		
BBB	N-37-124		
CCC	Floyd L. Smith State Park		
DDD	N-37-106		
EEE	N-37-121		
FFF	N-37-120		
GGG	Torrey Pines Park		

N 37-126 Represents Proposed Plan Site

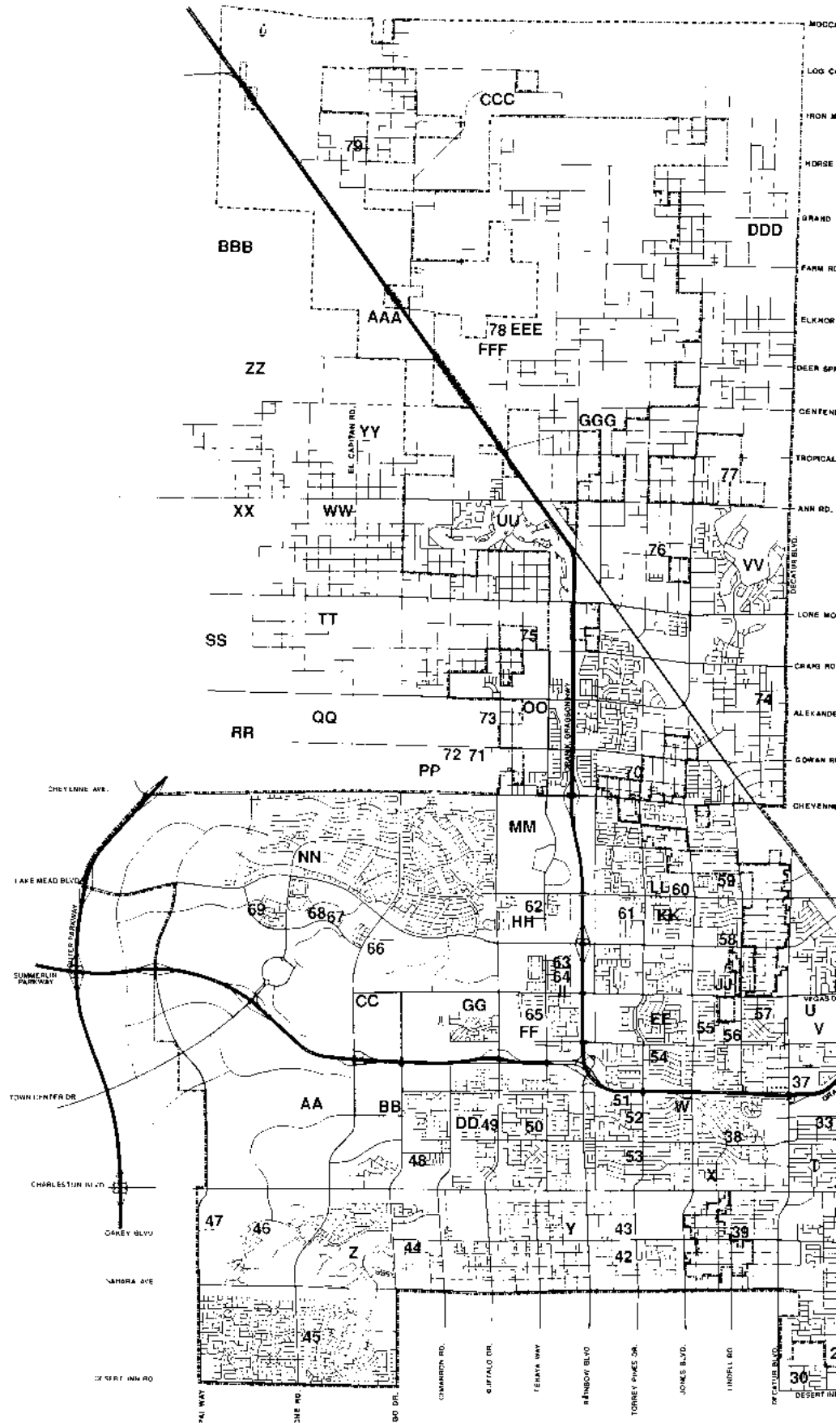
SOURCE: Dept. of Parks & Leisure, Bureau of Land Management and the Clark County Survey Office



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Issue 5: Recreational Trails

Many areas of the City of Las Vegas were developed in a rural lifestyle that remains today. The problem with most of these areas is that urbanization eventually encompassed them and access to open space was either cut off or diminished due to development. In the case of equestrian oriented neighborhoods this had a devastating effect due to the loss of open desert in which to ride. A system of recreational trails could help to reestablish this lifestyle, in some cases, as well as preserve rural areas that have to date not been effected by development, such as the Northwest Area of the City.

A rapidly growing urban area also has growing demands for recreational facilities. It becomes more and more important to furnish facilities and access to them. Access should not be based solely on the ability to drive an automobile to the park or recreational facility. In a City already congested with problems related to the automobile, facilities which can be reached by pedestrian, bicycle or equestrian travel helps alleviate some of the stress on our transportation system as well as providing a form of recreation in itself.

Issue 6: Park and Leisure Facility Security

Park and leisure facility use can not be maximized, if crime is evident or perceived in the parks. The City must recognize the need for more Park Rangers with the addition of parks and leisure facilities to successfully protect the parks and leisure facilities.

3G.3 Goal, Objectives, Policies and Programs

Goal: Provide efficient and cost-effective community facilities and services.

Objective A: Continue to provide an adequate and diverse system of parks and recreational facilities and services at the local, district and City-wide levels.

Policy A1: Coordinate planning, including determination of appropriate locations, size, and type of facilities for municipal parks and other recreational operations, with the City's General Plan.

Program A1.1: By 1992, coordinate with other City Departments and administer a community survey which can detail demographic information, special leisure and cultural arts interests, and assess public perception of leisure and cultural activities services in the City.

Program A1.2: By 1992, establish service and development standards for parks and recreational facilities that consider the City's fiscal resources and capabilities.

Program A1.3: By 1992, establish criteria to determine the adequacy of parks and recreational facilities in the review of development proposals.

Program A1.4: Periodically reevaluate the adequacy of parks and recreational facilities in accordance with determined service standards.

Program A1.5: By 1992, coordinate leisure and cultural facility locations and transit route locations and identified citizen user groups to improve access to parks for all citizens who lack mobility.

Program A1.6: By 1992, develop a Master Recreational Trail Plan which links existing low density equestrian areas with Floyd Lamb State Park, BLM lands, the Desert National Wildlife Areas, and other open space areas.

Program A1.7: By 1993, develop a Master Plan for leisure and cultural facility development which includes the products of the previous programs and complies with all development concepts included in the City of Las Vegas General Plan.

Policy A2: Continue to provide a variety of parks and recreational facilities.

Program A2.1: Continue to develop neighborhood and community parks to serve the needs of residents throughout all areas of the City.

Program A2.2: Continue to coordinate planning with the Clark County School District to avoid unnecessary duplication of recreational opportunities provided by public schools and private organizations.

Program A2.3: Identify opportunities to provide linkages, such as recreational trails, between parks and recreation in accordance with the update of the City's General Plan.

Policy A3: Continue to provide organized recreational activities and services at community recreation centers and park facilities throughout the City.

Program A3.1: Continue to provide programs for all ages in adaptive recreation, sports, and arts and crafts, as well as classes for special interest groups, and meeting rooms for clubs and service organizations.

Program A3.2: Continue to sponsor specialized programs and activities for senior citizens.

Objective B: Continue to provide an equitable means of financing park facilities and recreational services to serve the residents of Las Vegas.

Policy B1: Continue to utilize public funds, within budgetary constraints, to facilitate parks and recreational development and services.

Program B1.1: Continue to seek federal, state, Las Vegas Convention and Visitors Authority grants, Park Impact Fee Funds and other grants or endowments for parks and recreational facilities.

Program B1.2: Continue the cooperative arrangement with the Clark County School District to provide joint neighborhood park and school sites.

Program B1.3: Continue to coordinate plans with federal and state agencies to secure public lands which are suitable for park use.

Program B1.4: Continue to explore opportunities for public/private joint financing in the operation of public parks and recreational facilities.

Program B1.5: Generate alternative funding to organize a park foundation.

Program B1.6: Explore the feasibility of a major Parks and Leisure Activities bond issue ranging from \$15-20 million dollars.

Policy B2: Cooperate with private developers to ensure that adequate park space and recreational facilities are provided to meet the needs of new residents.

Program B2.1: Evaluate and monitor new development in accordance with the General Plan and with zoning and subdivision regulations to ensure adequacy of parks and recreational facilities.

Program B2.2: Encourage land dedication or land designation and construction of parks and recreational facilities for private maintenance, as may be appropriate, for large scale master planned developments.

Policy B3: Consider establishment of benefit assessment districts for park purposes along with other public facilities and services in various areas of the

City when requested by these residents.

Program B3.1: Continue to review various types of benefit assessment districts, particularly the use of property secured revenue bonds.

Policy B4: Provide continuing recreational programs and maintain park facilities by utilizing general funds, user fees and other resources.

Program B4.1: Continue to perpetuate reasonable user fees for city recreational facilities and programs.

Program B4.2: Continue to periodically reevaluate fees for recreational facilities and programs to ensure that such programs are available to all residents at reasonable cost.

Objective C: Provide efficient management of park and recreational facilities.

Policy C1: Establish priorities in the improvement of existing City parks which provide maximum benefit to the public.

Program C1.1: Maintain a list of priorities for park facility and recreational program improvements.

Program C1.2: Continue to coordinate and review plans for development of park facilities and recreational program improvements with the City Parks and Recreation Advisory Commission.

Program C1.3: Continue to encourage input from citizens and various organizations concerning park facilities and recreational programs.

Objective D: Provide expanded opportunities for cultural and artistic facilities, pursuits and programs.

Policy D1: Continue to encourage and sponsor cultural facilities and activities which enhance the opportunities for cultural and artistic expression in the community.

Program D1.1: Continue to sponsor ongoing community cultural activities, such as the Civic Ballet, Las Vegas Symphony and Rainbow Company.

Program D1.2: Continue to sponsor art exhibits and performances at city facilities and parks.

Program D1.3: Continue to maintain existing and encourage new city facilities for cultural enrichment, such as the Lorenzi Park Art Museum, the Reed Whipple Center, the Charleston Heights Arts Center, the Children's Discovery Museum, the Museum of Natural History and the Proposed Neon Park and Museum.

Program D1.4: Continue to provide leadership and creative mechanisms to help fund further development of the cultural community.

Program D1.5: Create environments favorable to the artist and creation of art.

Policy D2: Continue to provide City assistance to enhance community cultural activities through coordination of events and use of City facilities.

Program D2.1: Continue city support of cultural enrichment programs and community events.

Program D2.2: Continue to make city facilities available to community cultural groups at minimum possible cost.

Program D2.3: Continue to provide printed material describing City facilities, including capacities, hours of availability, cost range and any special consideration for their use.

Policy D3: Encourage private efforts to expand the cultural artistic base of the community.

Program D3.1: Encourage private sector participation in the community's cultural development.

3G.4 Evaluation and Implementation Matrix

The following Evaluation and Implementation Matrix (EIM) was prepared as a measurable summary of the above Policies and Programs. The EIM is to be used:

- as a method of measuring the implementation progress of the General Plan
- as a budgeting document for specific work programs
- as a tool for developing work programs

The following abbreviations apply to the Evaluation and Implementation Matrix

City Departments

CCSD	Clark County School District
CP	Community Planning and Development
FN	Finance Department
LVCCLD	Las Vegas-Clark County Library District
PL	Parks and Leisure

EVALUATION AND IMPLEMENTATION MATRIX: LEISURE AND CULTURAL FACILITIES					
POLICY (PROG.)	SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLEM.	ACTION/PRODUCT (RELATED PROGRAM)	REMARKS
A1 (A1.1)	Administer a community survey.	PL, CP	1992	Determine community and area interests and needs.	In preparation for a master plan for parks and leisure
A1 (A1.2)	Establish and adopt service standards.	PL, CP	1992	Research, establish, adopt, monitor and report a LOS.	In preparation for a master plan for parks and leisure
A1 (A1.3)	Adopt standards that can be used in development review process.	PL, CP	1992	Assess effects on park and leisure by new dev.	
A1 (A1.4)	Periodically reevaluate park needs based on standards.	PL	ongoing	Reassess park needs periodically.	
A1 (A1.5)	Coordinate leisure and cultural facilities locations with transit res.	PL, transit co.	1993	Study in master park and recreation plan.	
A1 (A1.6)	Develop master rec. trail plan.	PL, CP	1993	Develop and Implement a master recreational trail plan.	
A1 (A1.7)	Develop master park and rec. plan.	PL, CP	1993	Develop and adopt a master parks and recreation plan.	
A2 (A2.1)	Develop parks to service all res. of the City.	PL, CP	ongoing	Study in master park and recreation plan.	
A2 (A2.2)	Coordinate park planning with CCSD to avoid duplication.	PL, CCSD	ongoing	Study areas where possible duplication might occur.	
A2 (A2.3)	Provide linkages between parks.	PL, CP	ongoing	Use rec. trails when possible include concept in rec. plan.	
A3 (A3.1)	Provide recreation opportunities for everyone in the City.	PL	ongoing	Study to determine needs.	
A3 (A3.2)	Provide programs and activities for Senior Citizens.	PL	ongoing	Study to determine senior needs.	
B1 (B1.1)	Continue to seek and utilize grants.	PL	ongoing	Research and utilize all grants offered for park or recreation.	
B1 (B1.2)	Joint use of park and school.	PL,CCSD	ongoing	Continue coordinating to maximize land use.	
B1 (B1.3)	Continue to acquire public lands suitable for leisure dev.	PL	ongoing	Acquire BLM lands.	
B1 (B1.4)	Explore possibilities public/private joint financing of projects.	PL	ongoing	Study innovative financing method.	
B1 (B1.5)	Generate funding for a park foundation.	PL	ongoing	Study innovative financing methods.	
B1 (B1.6)	Bond issue for Park and Leisure	PL, FN	ongoing	Feasibility study for a large bond issue.	

POLICY (PROG.)	LEISURE AND CULTURAL FACILITIES (cont'd)				REMARKS
	SUMMARY	RESPONSIBLE DEPARTMENTS	DATE OF IMPLM.	ACTION/PRODUCT (RELATED PROGRAM)	
B2 (B2.1)	Coordinate with private side to ensure Parks in new develop.	PL	ongoing	Coordination program	
B2 (B2.2)	Encourage private dev. and maint. of parks in planned developments.	PL, CP	ongoing	Coordinate with developers to encourage development.	
B3 (B3.1)	Review various types of benefit assessment districts.	PL, CP	1992	Particularly revenue bonds to ease initial expenses.	
B4 (B4.1)	Perpetuate reasonable user fees for facilities and programs.	PL	ongoing	Study user fee possibilities.	
B4 (B4.2)	Continue to reevaluate fees based on reasonability.	PL	ongoing	Study to determine reasonable fees.	
C1 (C1.1)	Maintain priority list of dev. and improvements.	PL	1993	Set priorities for dev. in plan.	Follow park and rec. master plan
C1 (C1.2)	Coordinate park dev. plans with an advisory commission.	PL	ongoing	Work with an advisory commission.	
C1 (C1.3)	Encourage input from citizens for park and rec. issues.	PL	ongoing	Develop and administer a community survey.	
D1 (D1.1)	Sponsor ongoing cultural events and artistic expression.	PL	ongoing	Continue cultural programs.	
D1 (D1.2)	Sponsor at City Facilities and parks.	PL	ongoing	City events to install comm. feeling among residents.	
D1 (D1.3)	Encourage new facilities for cultural activities.	PL	ongoing	Offer more areas for activities and improve access.	
D1 (D1.4)	Provide leadership and funding for cultural development in City.	PL	ongoing	Creative financing, programs, and exhibits.	
D1 (D1.5)	Create environments favorable for artist expression.	PL	ongoing	Study possibilities for artist courtyard or adaptive reuse.	
D2 (D2.1)	City support for cultural programs and community events.	PL	ongoing	Improve cultural possibilities.	
D2 (D2.2)	Minimize cost for cultural groups to use City facilities.	PL	ongoing	Develop special fees for cultural arts groups.	
D2 (D2.3)	Advertise City availability of cultural facilities.	PL	ongoing	Continue aggressive marketing program.	
D3 (D3.1)	Encourage private participation in cultural development	PL	ongoing	Encourage public/private cooperation.	

IV. Infrastructure

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IV. INFRASTRUCTURE

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Introduction

The infrastructure of the City is comprised of four major components which are discussed in the following order:

- 4A. Sewer Collection and Treatment System
- 4B. Water Distribution System
- 4C. Flood Control System
- 4D. Solid Waste

Infrastructure is the aggregate of the sewer, water, flood control and solid waste facilities that allow the City to function.¹ This does not include schools, hospitals, jails, or other buildings with special public purposes. These are discussed in the Community Facilities section. Streets and circulation are in the Circulation section. Typically, infrastructure and facilities, like government itself, are responsive to social objectives. These objectives include health, safety, welfare, economic development, employment and recreation. The connection between land use designations and these facilities is important and subtle. Proper infrastructure planning allows for greater population densities and more economical development.

Land development requires water, sewer, trash disposal, drainage and roads. These facilities enable the buildings to be built, accessed, and safely used. Project development involves a variety of technical, fiscal, legal, environmental and political issues.

The City is traditionally the provider of infrastructure. Las Vegas does not provide its own water and solid waste services. Water is provided by the Las Vegas Valley Water District. Solid waste disposal is provided by a private corporation, Silver State Disposal. Otherwise, the City provides for the health, safety and welfare of its citizens directly by providing a wastewater collection and treatment and the use of washes and construction of chan-

nels for flood control. Local road improvements and flood control are coordinated through funding arrangements with the Regional Transportation Commission and the Clark County Regional Flood Control District. The City provides for infrastructure planning and construction in concert with other providers. These planning and construction activities are affected by market demands, local and regional land use plans and population estimates.

Once built, infrastructure facilities are usually maintained by the government. The long-term costs of these facilities on the City shows up in annual budget allocations to build, rebuild and maintain them. Operation and maintenance costs are as important as capital construction costs in evaluating the ability of the City to provide infrastructure to support its growth and development.

4A. Sewer Collection and Treatment System

4A.1 Background

There are two types of sewers in the City: sanitary and storm sewers. Sanitary sewers carry away the wastewater from residential and institutional uses, frequently combined with industrial effluent. Storm sewers carry the rainwater collected from roofs, roads and other impervious surfaces.

There are public and individual benefits which accrue from centralized wastewater collection and treatment systems. They include:

1. Improved health by minimizing exposure to waste-borne diseases.
2. Improved standards of living by making housing more affordable for everyone by reducing lot size and location requirements for wastewater treatment. Septic sys-

tems require one-quarter acre minimum lot, with public water, to effectively treat sewage from a house.

3. Promoting quality of life by eliminating the odor and insects associated with wastewater disposal.

The first wastewater collection system improvements were installed in the City of Las Vegas in 1912. Subsequent improvements were made to the system by bonds authorized in 1932 and 1942, and later as necessary to meet the needs of more and more customers over a larger and larger area. Today the Public Works Department is responsible for underground sewer collection system of approximately 660 miles to over 250,000 customers.

The City has been doing sewer master planning for many years. The first known available sewer master plan was titled "Report Upon a Master Plan of Sewer Systems for City of Las Vegas and Clark County Area."² This 1951 report provided plans for the city limits of Las Vegas and for the newly developing area known as "The Strip".

The 1959 "Report on Sewage Problems of the City of Las Vegas, Nevada", used higher population estimates to reflect the growth trends throughout the southwest and Las Vegas. Part of this projection effort was a generalized future land use projection as applied to the Report area. "...we have projected future land use as applied to the Report area. It is not our intent to establish a master plan for the future development of the Las Vegas area. We have only attempted to project what will be a very general pattern of the future development of the area in order to estimate future sewage flows and trunk sewer requirements."³ This 1959 report was updated in 1963. The latter sewer master plan report and its map represent the "defining document that our current system is built on."⁴

The 1969 master plan focused on collection system plans, rather than the treatment facilities. This was because of a proposed City-County facility interconnection.⁵

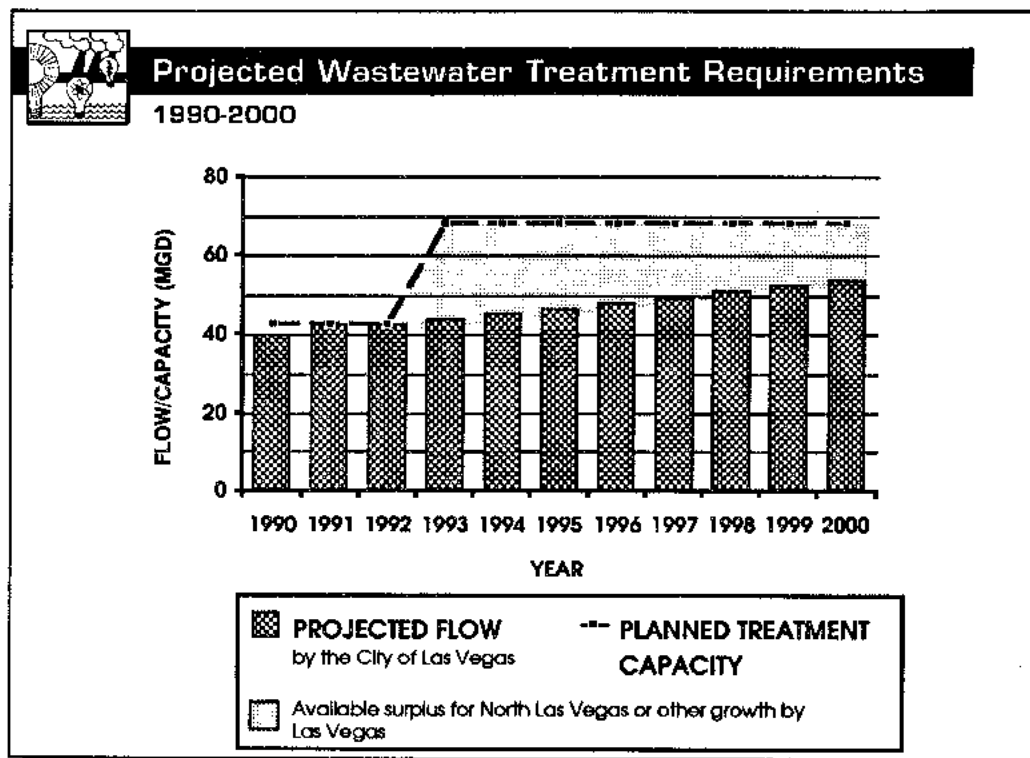
The 1974 report provided an update which addressed long-range system needs. These include increasing line sizes, identifying the Husite collection line locations and deleting the collection system detail for North Las Vegas. The 1974 update reflected EPA funding requirements and required a different analysis of the sewerage system, placing emphasis on industrial waste, inflow and infiltration and rate studies. This report pointed out that the general pattern of growth was northwesterly, and advised that the City not provide

sewer to areas which were not in the City limits. This was suggested in order to avoid duplication of lines in the border areas. The issues of infiltration (groundwater entering the lines) and inflow (stormwater intrusion into the pipes) were discussed. In 1951, groundwater was regularly encountered at six feet. By 1974, the report stated "Observations of trench construction ... indicates there is no groundwater anywhere in the City area at the depths where infiltration... could possibly occur."⁶ Regarding industrial waste, the 1974 report minimized its effect on the sewerage system since "There is no industry contributing to the Las Vegas Sewer System..." which met the EPA definition for industrial waste.⁷

The 1980 Action Plan, like the 1974 report, was not a master plan. It, too, focused on regulatory and economic analysis of the City sewer system. The 1980 report covered expected annexations. The conclusion was that sewer system improvements would have to occur whether or not annexations occurred in the northwest. At the time of this report, many of the areas not yet annexed by the City were nonetheless included in the Northwest Collection System Study.

The 1982 report reflected changing technologies and sophistication associated with detailed collection systems analysis. This analysis included the process of relating land use designations to population and flow projec-


Figure 1



Source: *Public Works 2000*, February, 1991, City of Las Vegas, Department of Public Works, p. 59

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Table 1

 Estimate of Sewage Flows by North Las Vegas based on Typical Buildouts								
Designation	Planned/ Equivalent Densities DU/AC	Acreage	Estimated Net DU/AC	Potential Buildout	ERU	MGY	MGD	
R/LD Rural Residential-Low Density	≤ 2.0	4,700	2.0	9,400 (u)	1.0	846,000,000	2,317,808	
CD Residential-Low Density	≤ 6.0	20,600	4.6	94,760 (u)	1.0	8,528,400,000	23,365,479	
HD Residential-High Density	≤ 18.0	5,600	13.0	72,800	.7	4,588,400,000	12,585,479	
MXC Mixed Use Commercial		3,100	.33 FAR	1,023 (ac)*	5.83 acre ^a	536,788,000	1,470,568	
O/BP Office/Business Park		2,000	.23 FAR	480 (ac)*	4.06 acre ^a	4,588,400,000	12,585,479	
I Industrial		2,000	.25 FAR	500(ac)*	2.21 acre ^a	99,450,000	272,466	
OS Open Space/Trails/Drainage		3,000						
Totals		41,000		176,960 units (u) 86,379,480 sq. ft. (*based on built acres)			40,452,334	

¹ An ERU=90,000 gallons of domestic strength wastewater generated by a single family house

² ERU figures based on estimated number of gallons by use. NLV staff assumes the following:
 Industrial .05 gallons/building sq. ft.;
 Commercial .10 gallons/building sq. ft.;
 Office/Business Park .10 gallons/building sq. ft.
 (Source: City of North Las Vegas Planning Dept., May 1991)

FAR - Floor Area Ratio. The ratio of building coverage per gross acre of land. $10,890/43,560 = .25$ FAR

GPJNS Table 1 Est flow;RB;pm2-30-92

tions. The consultant attempted to catalog records so they could be maintained and updated to reduce future data entry needs. The report also extended the study boundary to the base of the mountains to the west.

Two conclusions may be drawn from the summary of these various master plans and action plans. First, that the various plans have evolved from building a system capable of meeting projected populations in agreed upon areas, to a perspective of monitoring and analyzing the system for its relationship to directions of growth, design criteria and the financing of the utility. Second, that the system capacity appears to be based upon overall projections far greater than actual growth figures.

The intent of this last statement is not to say that the City has built an excessive treatment and collection system. The City must also accept all sewage flows from North Las Vegas. The City also develops projections for specific land areas and projects and may enter into oversizing agreements with developers to prepare for possible growth in such areas.

Such flow projections have led to projected wastewater treatment requirements for the period 1990-2000 (Figure 1). The treatment capacity for the City appears to be far beyond its own expected flows. However, the City also provides sewage treatment for North Las Vegas.

According to the projections on Table 1,

if North Las Vegas builds out to its adopted Master Plan, it will ultimately contribute 40,452,334 gallons per day to the City's treatment plant. Over time, this development could lead to conflicts between the needs of the City and those of North Las Vegas. A close monitoring of the growth trends and assumptions of each entity will avoid conflicts in allocating treatment plant capacity.

Figure 2 shows the changes in population and miles of collection system as well as predictions to the year 2000. Collection is expected to keep pace with the population of the City. This is primarily because the majority of the collection system is constructed at the expense of the developer as sites are developed. Map 1 shows the main

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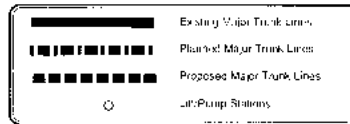
Las Vegas General Plan
Infrastructure Element

Map I

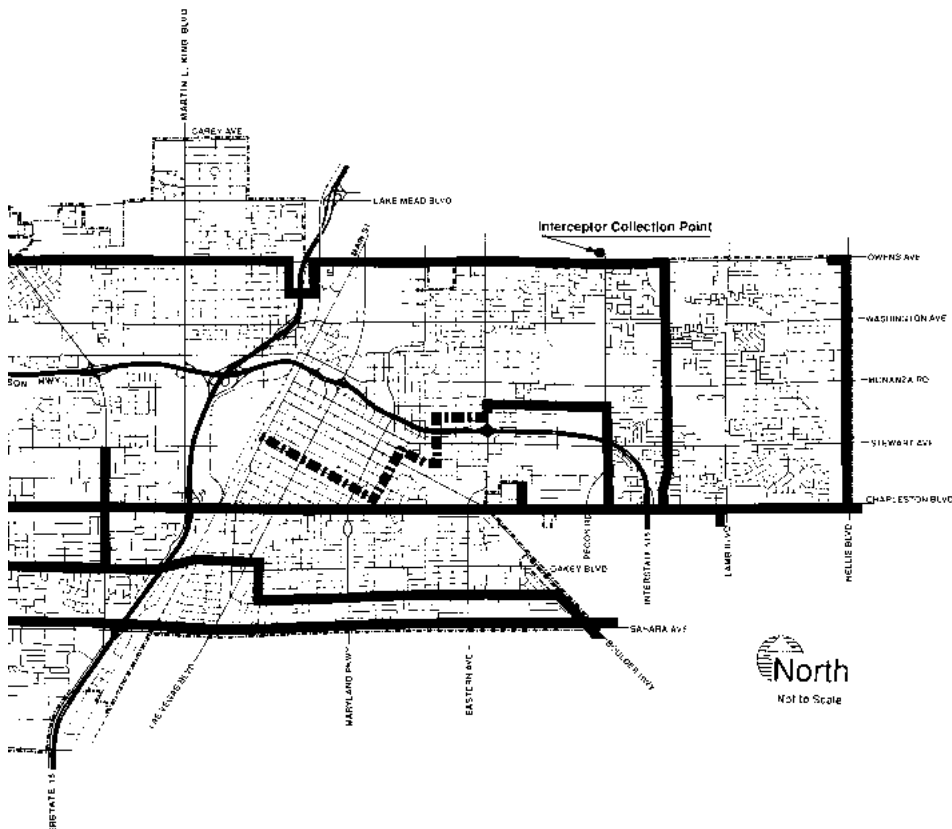
City of Las Vegas Sewer Collector System

Sewer Pipelines

LEGEND



SOURCE: City of Las Vegas Department of Public Works



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sewer lines serving areas of development approved by the City.

The goal of the Public Works Department is to provide high quality wastewater collection services at reasonable rates. This is accomplished by planning the expansions to the system, and operating and maintaining the system, to meet the needs of new developments while maintaining or enhancing the quality of service to existing customers. Pipes varying in size convey wastes from homes and places of work to the treatment plant generally by "gravity

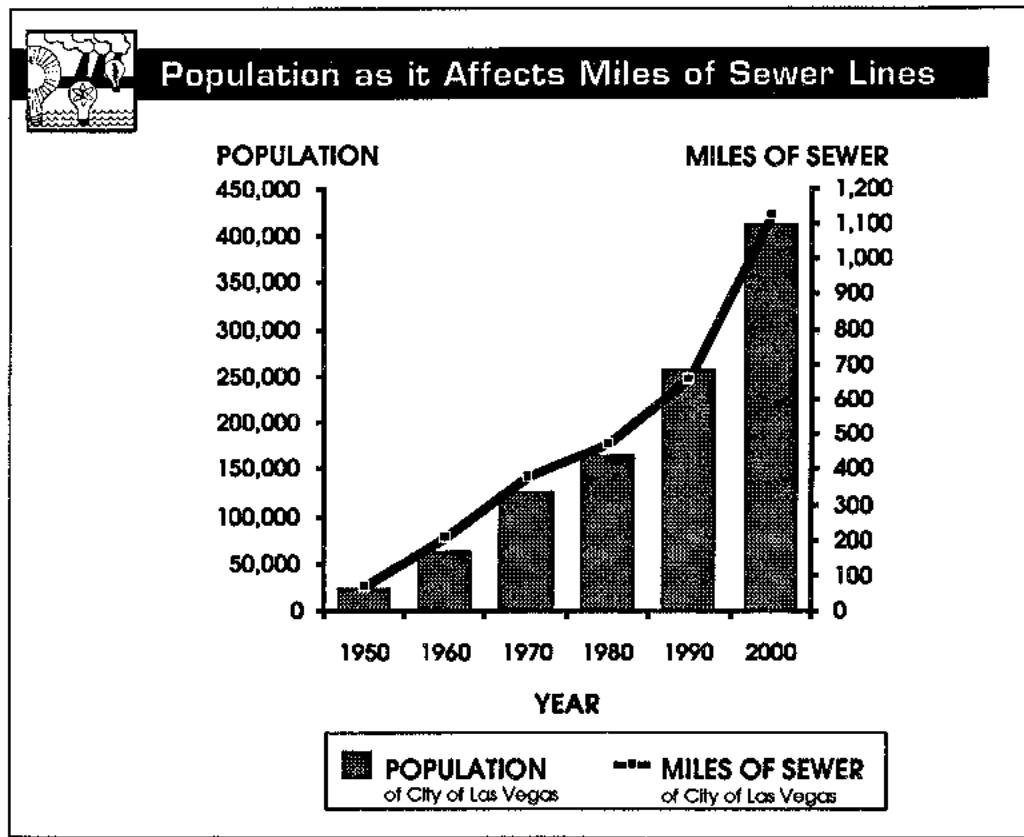
flow". This term means that the pipes are tilted within the ground to cause the liquid wastes to flow downhill without the need for pumps. This increases the reliability of the system and reduces or eliminates the energy costs associated with pumping.

The Public Works Department extends the collection system to meet the needs of new customers by oversizing and extension policies. The construction is funded through the City's Capital Improvement Program (CIP).⁸

The following two paragraphs are excerpted from "Public Works 2000", February, 1991, p. 54, City of Las Vegas, Department of Public Works.

The oversizing policy allows the City to pay for the added portion of costs of a collection system that is beyond the needs of an individual development. A similar policy allows a development to recover a portion of its original investment in collection system extensions from others tapping onto the extension. These methods of system expan-

Figure 2



Source: *Public Works 2000*, February, 1991, p. 54, City of Las Vegas, Department of Public Works,

GP.IN S Fig 2 sewer lines;RB:prv/B-31-91

sion are driven by the real estate market while conforming to local master land use plans. Such methods provide a cost-effective means for infrastructure expansion.

To address the needs for the collection system for the Year 2000 and beyond, the Engineering Planning Division will update the Sewer Master Plan to address the physical and administrative aspects of the growing system. It will also provide a collection system modeling program which will link with the Geographic Information System (G.I.S.) to provide accurate and timely responses to citizen inquiries regarding the availability and location of potential connection to the collection system. The Sanitation Division will continue to operate and maintain the ever-expanding collection system to meet the future needs of the community.

The City of Las Vegas Sanitation Division is currently undertaking a major expansion of its Wastewater Treatment Plant, in two phases, 1991 and 1994, respectively. Phase I, completed in 1991, the capacity is nearly doubled to 66 million gallons per day (MGD) from the currently permitted 37.5 MGD. This is expected to meet the needs of the City through the year 2008. This date coincides with the termination date for contracted service requirements to provide sewage treatment for the City of North Las Vegas. Phase II of the expansion will add facilities for tertiary treatment to remove additional amounts of phosphorus, ammonia compounds and chlorine as required by Federal Clean Water Standards.

In 1988, the City of Las Vegas was directed to initiate and create its Industrial Waste Pretreatment Program (IWPP) in accordance with the Code of Federal Regulations. The IWPP enables the City to identify and detect industries who generate industrial wastes and discharge to the City's

sewer system.

With the growing level of environmental sensitivity, the Sanitation Division anticipates that standards for wastewater will become increasingly stringent. Division staff is monitoring this situation and considers the facilities planning needed to meet these requirements one of its major duties. Additionally, resource management within the Valley will be more important. With the growing concern over water conservation, measures such as reuse of effluent may be initiated which will require the cooperation of all the entities within the Valley. Reuse programs are complicated by the "return flow credit" considerations for using water from the Colorado River. By returning treated water to the river, a greater amount than that allocated by agreement (300,000 acre feet per year) can be diverted to support growth.

This General Plan update springs from several requirements. Among them are the requirement for timely data, the requirement to keep up with changing issues and their focus, and the requirement to develop strategic planning for resources. This last requirement was addressed in the 1990 "Las Vegas 2000 and Beyond" strategic plan" which is described in the Introduction Section.

The '2000' document contained "Actions" specified to be accomplished ("the process is not over. . . We must put these plans into action.") These actions are incorporated into the Plan update so that the process of citizen involvement and institutional response will continue.

The Actions relating to the Sewer Collection and Treatment System are:

- Develop a sanitary sewer collection, treatment and distribution system which considers cost (scale and location) in relationship to valleywide topography.

- Explore possible opportunities for gray water projects.

4A.2 Issues

The City of Las Vegas' sanitary sewer plans are fundamental to the operation of a sound system for the collection and treatment of wastewater. However, these operations should be reviewed in the context of the City resources of land, water, roads and air. These City resources are assets which benefit Las Vegas and its citizens, and which contribute to the growth of the entire valley. Sewer issues for this General Plan update include:

Issue 1: Sewer Service For North Las Vegas

In 1952, the cities of Las Vegas and North Las Vegas executed an interlocal agreement (subsequently amended) which provides that Las Vegas will accept and treat all of the wastewater from North Las Vegas. The agreement expires July 15, 2009. The interceptor connection points are shown on Map 1. North Las Vegas installs, operates and maintains its own collection system.

The agreement provides for user charges (which include operations costs), a water sampling program to verify and modify treatment and connection fees to be charged to all users. The billing rates are based on "equivalent residential units" (ERU) for each type of user discharge. The agreement defines an ERU as being the "wastewater discharge equivalent to that discharged by a single family dwelling unit, i.e., 90,000 gallons of domestic strength wastewater per year." Based on an average household size of 2.5 persons, this is 247 gallons per day per household. The City is

paid annually by the City of North Las Vegas for its total customers at the same rate as the City charges its customers. This interlocal agreement was modified in September, 1990, to incorporate ordinances drafted by each City governing the treatment of industrial wastes.

The North Las Vegas Master Plan, adopted in November, 1989, provides for the future growth of a 41,000 acre City. Of this acreage, 30,900 acres are designated residential; 7,100 acres have the potential for Gaming Enterprise uses (although officially designated as mixed use commercial, office/business park or industrial); and 3,000 acres are listed as open space. The designations are shown on Table 1. Column 3 "Estimated Net DU/AC" represents the expected amount of development of each land category, based on present buildout rates. The calculations are based on information provided by the North Las Vegas Planning and Public Works staff.

The projections from Table 1 show that North Las Vegas, as planned, may consume all the extra capacity that will soon be added to the treatment plant. In the meantime, should Las Vegas grow faster than projected, there may be competition for collector line and treatment plant capacities. This competition could require larger interceptor and collection lines, as well as accelerated schedules for constructing new treatment plant capability.

Issue 2: City Facility Capacities and Service Areas

Plant and pipe capacities are based upon factors which may include probable land use densities. Land use designations indicate an expected maximum density, or dwelling units

per gross acre, but are always subject to revision. Collection and treatment systems are sized according to such present day information. These are adjusted as the market causes changes to the land use plans.

Service areas are planning boundaries established by a jurisdiction. They designate the expected limits of service to be provided for a period of time. A service area boundary allows the City to keep pace with its growth pressures by containing locations and expenditures for services. There is a relationship between project design and the capacity to provide service. That relationship is a function of existing uses, expected populations, and capacities of existing facilities.

The issue here is to assure that adequate facility capacity is available to support development within a designated area. The General Plan for the City specifies the location of expected growth. Facilities, such as sewer lines, are sized to handle that growth. Should a project with a use intensity greater than that designated by the City be submitted for review, it should be analyzed in light of its effects on the capacity of facilities to absorb that growth. The decision should be in the context of the developer paying for the added capacity, or the City not allowing the growth, or that the service line may be moved to accommodate the new growth. Each of these alternatives is considered in the light of the goals of preserving the public health, safety and welfare.

Issue 3: Levels of Service and Land Use Planning

A level of service can be expressed very simply as a unit of demand per capita. For example, in the "Water

Budget", the Colorado River Commission calculates the average flow from the Las Vegas Treatment Plant at 143 gallons per person per day. Based on 2.5 persons per household, a single family dwelling may be estimated to generate 358 gallons of sewage per day.*

Once agreed upon, an advantage of such a figure is that the effect of a development on the capacity of existing pipes and plants can be measured in quantitative terms. Collection lines, lift stations and treatment plants can be checked to see if there is enough design capacity to absorb the added flow. By the same token, proposed developments and approved land uses can be quantified to provide an estimate for future designs and possibly their timing and funding. The assumption here is that a land use plan, once adopted, will be enforced. If changes to the Plan are necessary, they will be made based upon considerations including the effects on traffic, pollution, water requirements, solid waste disposal, parks, public finances and the political impact of change.

Levels of service may also be expressed qualitatively. That is, a treatment plant may have to meet federal or state standards at its discharge outlet. These standards are expressed in terms such as "1 part per million of phosphorous", or ".30 milligrams of suspended solids per liter." Yet, there still remain the considerations of line sizing and operations and maintenance, all a function of adopted land uses. Ultimately, design capacity and the ability of the plant to meet standards are directly tied to population.

**The earlier figure of 90,000 gallons per ERU equals 247 gallons per household per day.*